THE RAILWAY GAZETTE
A Journal of Management, Engineering and Operation
INCORPORATING
Railway Engineer • TRANSPORT • The Railway News
The Railway Times • Herapath's Railway Journal ESTABLISHED 1835 • THE RAILWAY RECORD.
RAILWAYS ILLUSTRATED • THE RAILWAY OFFICIAL GAZETTE

PUBLISHED EVERY FRIDAY
AT
33, TOTHILL STREET, WESTMINSTER, LONDON, S.W.1

Telegraphic Address: "TRAZETTE PARL., LONDON"
Telephone No.: WHITEHALL 9233 (12 lines)

Annual subscription payable in advance and postage free

British Isles and Abroad .....£2 5s. 0d.
Single Copies .....One Shilling

Registered at the General Post Office, London, as a Newspaper

VOL. 88 NO. 16 FRIDAY, APRIL 16, 1948

CONTENTS

	PAGE
Editorial Notes	449
The Growth of Committees	451
Poor Quality and High Price of Coal	452
South African Railways Overseas Mission	452
Prevention and Destruction of Weeds on the Permanent Way	453
Letters to the Editor	454
The Scrap Heap	456
Overseas Railway Affairs—Rhodesia, India & Pakistan, Ceylon, Malaya, Western Australia, Canada, Argentina, United States	457
Publications Received	458
Traversing Platforms in Locomotive Repair Shops	459
First Albanian-Built Railway	460
New Locomotives for G.N.R.(I.)	461
A Heavy-Duty Railway Wheel Lathe	464
A Remedy for Loose Chair Screws	466
Personal	467
Midland Railway Co. of Western Australia Limited	470
Modernised Equipment for Pennsylvania Railroad	470
Results of the Staggering Campaign	471
Parliamentary Notes	472
Questions in Parliament	472
Notes and News	473
Official Notices	475
Stock Market and Table	476

British Transport Directory of Officials

A list of members of the Ministry of Transport, the British Transport Commission, the Railway Executive, the London Transport Executive, the Road Transport Executive, the Docks & Inland Waterways Executive, and the Hotels Executive, together with their principal officers so far as they have been announced

Reprinted from The Railway Gazette

PRICE ONE SHILLING
By Post 1s. 3d.

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"Workers' Control" of the Railways

ACCORDING to the *Railway Review*, those in charge of the future management of the nationalised railway service may have to pass a new test—that of "democratic socialist convictions." In an article in its April 9 issue, it is concerned as to whether the executives appointed to manage the railways can be relied on to do so in a spirit and in a practical manner consistent with the "new social ownership and purpose of the industry." That will be so, it is suggested, only to the extent that they shed their old and share "our political beliefs"—that they combine managerial ability with democratic socialist convictions. Asking whether the railway service is to remain under authoritarian management or whether it is to be conducted democratically, the *Railway Review* says that this question can be solved only by giving to the worker responsibility for the way in which his work is conducted. It adds that those who have been taken over from the old order to manage the new, are on trial. It believes that the Government, to avoid interruption in the passage from private to social ownership of the railways, had to appoint to the administration men "who do not hold our political beliefs." At the same time, it suggests that railwaymen should work to acquire the power to ensure that future management of the railways will be one that "combines technical efficiency with convictions in accord with the spirit and purpose of a socialised industry."

* * * *

Transport Commission Personnel

With our January 30 issue, we published, as a supplement, a list of the chief officers and departmental heads of the Railway Department of the Ministry of Transport, the British Transport Commission, the Railway Executive, the London Transport Executive, and the Docks & Inland Waterways Executive, and the chief officers of the six railway Regions. That list was unofficial in that it was compiled from announcements made from time to time and published in our columns. We have now been able to bring the list up to date, and on this occasion it has been compiled from official sources. It is a complete record, to the best of our belief, of all principal officers in the six railway Regions, and it also contains all the details so far published relating to the Executives which have been set up by the British Transport Commission. In addition to those previously included, the present list, which runs to forty pages, includes the Road Transport Executive and the Chairman of the Hotels Executive. The list has been prepared with care, but we have again taken the precaution of marking it "E. & O.E." to forestall letters pointing out omissions or minor errors.

* * * *

The Pioneer of Model Engineering

The death on Saturday last of Mr. Percival Marshall coincides with a landmark in the history of model engineering, of which he was the pioneer, for the first journal which he founded, *The Model Engineer*, celebrated its 50th anniversary in January, and the Society of Model & Experimental Engineers, which also he founded, similarly attains its jubilee this year. His early training resulted in a scholarship, a medal, and a whole sheaf of technical diplomas, which seemed to destine him for an engineering career, but there was a long family association with the publishing world, which resulted in his adoption of freelance journalism, and then editorial work, first on a hardware paper, and then a photographic journal. The desire to combine his interests in journalism and engineering eventually led him to realise that there was no adequate provision for the interests of the model-maker and the amateur engineering enthusiast, and thus he launched *The Model Engineer and Amateur Electrician* (to give it the original title) in January, 1898, and remained in control for a full half-century. From this grew the firm of Percival Marshall & Co. Ltd., which has long since been noteworthy also for its series of textbooks, and is now an associate of the Electrical Press Limited. The club movement which he launched has resulted in the formation of well over a hundred local clubs and societies, both in this country and in many parts of the Dominions and the U.S.A., and it would be difficult to assess the value of this activity in the recent war. As a publisher, Mr. Marshall took a keen interest in the affairs of his trade and

served for about 15 years as Executive Chairman of the Periodical Trade Press & Weekly Newspaper Proprietors' Association, until becoming a Vice-President in 1943.

* * * *

Another Steel Output Record

Despite the effect of the Easter holidays, steel production in March was at the record annual rate of 15,117,000 tons. This compares with the rate of 15,049,000 tons in February, the previous record, and with only 10,190,000 tons in March last year, when output was affected by the fuel crisis. For the first quarter of this year, output also constituted a record of 14,933,000 tons annual rate; this was no less than 824,000 tons better than in the best previous quarter, which was that of April-June, 1940, which has become known as the Dunkirk quarter. Pig-iron production showed a further improvement in March, when it reached an annual rate of 9,303,000 tons, compared with 9,169,000 tons in February and only 6,400,000 a year ago. Although it has been possible steadily to increase output of pig iron, the total production is not sufficient to check the continued drain on stocks, and additional coke is necessary.

* * * *

British Railways Stockholders' Union

The British Railways Stockholders' Union, which played an active part in maintaining contact between stockholders and the boards of railway companies, is now in process of winding up. The Union came into existence in 1931 as the result of a letter which Sir Charles Stuart-Williams wrote to *The Times*, and which was followed by a meeting in Central Hall, Westminster. For the first year it was known as the Railway Reform League. Sir Charles Stuart-Williams, a director of the East Indian Railway, on which he served from 1900 to 1914, was Chairman of the Union from its beginning, and he did much to promote its work and to maintain good, if sometimes critical, relations with the railway boards. For a number of years he was in regular attendance, and frequently a speaker at the annual meetings of the four main-line companies. The first General Secretary of the Union was Mr. Ashley Browne, who, with Sir Charles Stuart-Williams, was one of the founders of the Railway Reform League. He was succeeded in the secretaryship in 1938 by Mr. Ernest Short. One of the last activities of the Union was promotion of the proposal for compensation to directors displaced under the Transport Act, 1947.

* * * *

British Railway Investments in Brazil

According to the annual compilation made by the *South American Journal*, the total of British capital invested in Brazil in 1947 was £213,355,744, on which interest received was £7,963,115. The average rate of interest was 3·7 per cent., the same as in the previous year, and the amount on which no remuneration was received was £25,489,073. The total capital concerned with railways in Brazil was £31,939,195, on which interest amounting to £463,297, or 1·4 per cent., was received. This compared with 2 per cent. for 1946, and the total on which no payment was forthcoming was little changed at £19,581,519. In part, the decline in the return on the capital was due to the non-payment of a dividend on the ordinary stock of the San Paulo Railway, in view of that company's property having been taken over by the Government. The Leopoldina Railway paid only one year's interest during 1947 on its 4 per cent. debentures compared with 8 per cent. in 1946, when a year's arrears in interest was forthcoming. The best return was made by the miscellaneous group of industries in which British investment was involved to the extent of £54,008,170, and on which the interest receivable was £3,552,680, or 6·5 per cent.

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Overseas Railway Traffics

Antofagasta traffics lost £2,170 in the week ended March 28, but recovered to show a gain of £21,110 in the next seven days. Their aggregate at the end of the first quarter was £663,780, an increase of £177,950 over the previous year. Nitrate Railways results for the first three months of the year totalled £72,991, an increase of £23,665. La Guaira & Caracas results for the quarter, however, were $63,436 lower. On the Great Western of Brazil there was a gain of £7,000 in the week ended April 3, offsetting the decrease of £4,300 in the previous week, when the aggregate improvement had fallen to only £100. Central Uruguay traffics advanced by £11,833 in the same week, maintaining progressive improvements recorded since the beginning of March, although the aggregate is still £87,905 below the preceding year. Leopoldina receipts continue to compare unfavourably with 1946, being £136,358 down on the first quarter. Successive decreases of £4,942 and £13,648 have been shown in the past two weeks. Canadian National gross earnings in February rose by £737,250, but operating expenses were £1,062,750 higher, resulting in a net deficit of £183,000. Although aggregate results improved by £1,023,250, there was a deficit of £324,250 in net receipts for the two months.

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Argentine Railway Repayments

The formerly British-owned Argentine railway companies have now given notice that their transfer books will be closed finally on April 27. In effect, this means cessation of dealing in the preference and ordinary shares of the companies, but it does not necessarily imply that the first payment to stockholders will be made any earlier than previously had been expected. The general opinion is that the amount of the first payment will be made known by the end of August. The liquidators are seeking to make the first payment as near to the total as possible, and in some quarters it is expected that up to 90 per cent. of the repayment may be forthcoming by that time. In that event, only one more—a final winding up—payment would be made and this would avoid the work involved in making more than two payments. The decision to close the books towards the end of this month will enable the preparatory work of preparing the lists of stockholders and the amounts held to be carried out at the same time as the calculation of the first liquidation payment. Extensive examination of charges, claims, miscellaneous assets and so on will be necessary before the amount of the first payment can be decided.

* * * *

Tinkering with the London Traffic Problem

The gist of the Minister of Transport's statement on the staggered hours campaign and other steps taken to improve transport services, reported elsewhere in this issue, is that Londoners who now wait twenty minutes for a bus must be grateful it is not half an hour, and that strap-hangers might have been yet more uncomfortable (if possible) without them. London Transport operating managers admit, in a memorandum issued at the same time as the Minister's speech, that underground extensions have induced further traffic movements and that the relief afforded to road transport has been absorbed by other local traffics. Furthermore, the number of insured workers in the Central London area increased in 1947 by more than 100,000 (an increase of 13 per cent.). Thus, as a correspondent pointed out in our April 2 issue, measures taken to relieve congestion have, as usual, been offset by increase in traffic. Questioned by our representative, the Minister ruefully agreed that the laudable efforts of the London Transport Executive and the regional committees on staggered hours had been nullified by the population influx, but refused to accept any responsibility for deciding on London's optimum population and controlling population movements. Until the problem is tackled from this aspect there appears to be little prospect in the foreseeable future of any substantial improvement in London travelling conditions.

* * * *

Co-ordinating the Ports and Canals

In an informative paper on the future of British ports and canals, read before the Institute of Transport on April 12, Mr. W. A. Flere, A.M.Inst.T., of the Port of London Authority, suggested methods by which the British Transport Commission might administer this section of its responsibilities. His recommendations, in common with arrangements already put into effect, envisage co-ordinated control of one aspect of transport, but do not appear to make any contribution to a co-ordinated transport system. In fact, under the administration scheme proposed, by which the country would be divided into seven areas and a Scottish group, each controlled by a local committee under the general direction of the B.T.C., what are described as "sectarian interests, such as County Council,

railway, road or canal representatives," would be excluded. Suggested composition of the local committees would include elected representatives of trade and payers of dues on coastwise and foreign shipping, nominees of the Ministers of Labour, Defence, and Home Affairs, and, where applicable, representatives of the local catchment board or land drainage authority, thus co-ordinating all interests concerned except those of (inland) transport. Mr. Flere also directs attention to the "Cross" canal scheme put forward by the 1909 Royal Commission on Canals, by which existing waterways connecting the Humber, Thames, Severn, and Mersey would be modernised, and emphasises the need for a port research establishment.

* * * *

Re-appearance of "Signal und Draht"

The German signalling periodical, "*Signal und Draht*," was able to resume publication in January this year, and the first number of the new series is reviewed in this issue. In common with most German technical journals, it had been obliged to suspend its activities towards the end of the war. The journal was founded in 1906, largely on the initiative of Eduard Scholkmann (1850-1909), the author of a valuable treatise on signalling and principal adviser on that subject to the Prussian State Railways Administration. Its original title of *Das Stellwerk* (*The Signal Box*) was superseded not long afterwards by a rather cumbersome name; the adoption, we believe at the suggestion of Herr A. Dobmaier, of the simple and effective name, *Signal und Draht* (*Signal and Wire*), is a welcome simplification. The paper, now under the general editorship of Herr W. Winzler, was the first and is still one of the few devoted entirely to signalling and safe working on railways.

* * * *

Road Haulage "Unit" Company in Scotland

In announcing the broad outline of the organisation of the Road Transport Executive, it may be recalled that Sir Cyril Hurcomb recently stated that, during the interim stage, large road haulage companies acquired by the British Transport Commission will act as parents to smaller units for the purposes of operation and administration. Examples are to be found in Transport Services (B.T.C.) Limited, and in such interests as were acquired from the main-line railways as Carter Paterson, Pickford, and Wordie. These are being managed as separate units, but with reconstituted boards of directors. Although Wordie & Co. Ltd., of Glasgow, has worked in close association with the railways for a great many years, ownership was acquired only a short time before nationalisation. This business dates back to approximately 1700, and was incorporated as a private company in 1932. It acted as a carting contractor to the L.M.S.R. in Scotland, and (including subsidiaries) operates about 600 motor vehicles, in addition to about 600 horses, throughout Scotland. Of the issued capital of £286,000, the L.M.S.R. formerly held 143,000 shares, but Mr. W. Wordie remained in charge as Managing Director. In December, 1947, the L.M.S.R. completed the purchase of the whole of the outstanding equity, at a cost of £388,960, making the total cost of the investment £531,899. This passed to the British Transport Commission on January 1 of the present year, and thus enabled Wordie & Company, as a wholly-owned subsidiary, to be available as a unit road haulage company in Scotland.

* * * *

The Growth of Committees

ONE of the characteristics of modern socialised industries is the rapid growth in the number of committees which takes place in an endeavour to keep in touch with the varied facets of problems with which it is necessary to deal. In the case of the nationalised railways, for example, any endeavour to arrive at standardised products, practices, or methods of working, must inevitably reveal the differences which have grown up during the long years when the railways were privately owned, and which have become an integral part of the operation of each of the lines. Because the advantages which the more optimistic promoters of nationalisation expected to achieve must necessarily flow from such products of unification as standardisation, and the achievement of the greatest efficiency and economy of operation as the result of unification, it has become necessary to bring into being a very large number of committees, and naturally the main committees already have become greatly outnumbered by their sub-committees.

Obviously, there are grave disadvantages in too free a growth of committees, although it is not so easy to define where the line should be drawn. Not the least of these disadvantages is the immobilisation of senior manpower from more productive work by the necessity to attend meetings. We have heard of cases in which a Chief Officer and his principal assistants have had to spend so much of their time in committee work that their normal departmental duties have suffered. There is, too, a tendency inherent in the committee system for many details to be brought forward for discussion which might very well be dealt with elsewhere and the result submitted to the committee for approval or action.

On the other hand, if it were decided greatly to reduce the number of committees which are known to be considering railway matters and reporting to the Railway Executive, it might well mean that decisions would have to be taken by some Railway Executive officer without full knowledge of the implications of the course he promulgated. The numerous divergencies, practices, standards, and so forth which obtain in the railway Regions make it impracticable for one person, who although familiar with conditions of the railway from which he joined the Executive, probably would have but an imperfect knowledge of all the variations obtaining in the other five Regions, to give a decision which might not prove ill-founded.

The drawback to having a large number of committees is not only the amount of time absorbed but the amount of paper produced. The production of minutes and reports not only makes a considerable call on time and manpower, but also results in a flood of documents at the highest level. This is a matter to which we directed attention when the organisation of the Railway Executive was first made known. We pointed out then that the scheme which had been adopted seemed to place a super-human responsibility on the specialist members of the Railway Executive, and we also suggested that much would depend on whether the specialist members realised that there is seldom a best way of doing anything.

It is the fact that what may be very good in the Southern Region may be quite the reverse in the North Eastern, that has occasioned so many divergencies in practice. The attempt to bring about standardisation is the cause of the growth of committees. In its turn, the growth of committees is the cause of a great mass of paper flowing to the Railway Executive, and this in turn must make so full a call on the time of its members that they can have but little left for dealing with the general policy or administration of British Railways.

The Railway Executive itself is responsible as a whole for decisions taken and for general administration of the railways. Its direct responsibility to the British Transport Commission for the railway part of British internal transport places on it a heavy responsibility. The successful discharge of its duties calls for high qualities of leadership, creative ability, and technical knowledge, to enable it to function efficiently and to secure the best results. It is from the Railway Executive that the initiative and stimulus to achieve the objectives of the Act must be expected to come. It may well be that in achieving this, the decision to make most of the members of the Executive discharge departmental as well as managerial functions, and at the same time to place responsibility on that body as a whole, may prove to be a weakness. That, indeed, was undoubtedly the thought uppermost in Sir Robert Burrows's mind when he contributed his recent article to *The Daily Telegraph* which was the subject of an editorial in our last week's issue.

There is no doubt that in all organisations of the kind which has been set up to administer the railways, there is a disadvantage as compared with the company system in that initiative, if any, must flow from a board rather than from a person. On a railway company, the personality of the General Manager could, and often did, play a considerable part in the successful running of the railway; moreover, the practice of bringing proposals from committees to a board of directors who were essentially administrators, made for speedier decision than is likely to be the case when proposals are remitted from committees to a board on which the functional element predominates.

Poor Quality and High Price of Coal

IN our issues of March 12 and April 2 we urged the need for an inquiry into the question of locomotive coal supply because the quality of the fuel had deteriorated while its price had risen persistently during the period of Government control of the collieries and since their nationalisation. The National Coal Board, instead of remedying matters, apparently proposed to develop coal exports at the expense of large-scale consumers in this country. In its 20th and last annual report, the Central Electricity Board has some caustic remarks about coal supplies for power stations which show that the electricity supply industry also has been treated with scant consideration. Having in mind the bearing of electric current costs on the problem of railway electrification, we give below a summary of the Board's statements.

At the end of December, 1947, the average pit-head price for coal supplied to Grid stations increased by 148 per cent. over November, 1939, whereas the average price of all commercial sales rose by only 119 per cent. This was rough on the Board because it used much low-grade coal which would otherwise have remained without a market. Graded coals were reduced in quantity and were replaced by inferior coals with such an excessive ash content that between 1939 and 1946 the average calorific value of the coal supplied decreased by 5·4 per cent. The loss of generating capacity caused by unsuitable fuel was 500,000 kilowatts on an average during one week in March, 1947. There was an improvement later in the year, but during the whole of 1947 the average weight of fuel consumed was 1·501 lb. per unit sent out as compared with the 1938 average of 1·430 lb. The increase of 5 per cent. reversed the upward trend in thermal efficiency achieved before the war and, coupled with the rise in price, lifted the average fuel cost per unit sent out in 1947 to 151 per cent. over the 1938 figure.

The Central Electricity Board stresses the point that the real value of coal lies, not in its weight, but in the heat which it contains. At present prices, a given amount of heat in low-grade coal costs substantially more than the same amount of heat in better-class coal. Since 1932 the major factor influencing the average cost of production of electricity has been the variation in the quality and price of coal. On April 1 the Central Electricity Board handed over the Grid to the British Electricity Authority in accordance with the provisions of the Electricity Act, 1947. With the transfer, the problem of restoring thermal efficiency to the pre-war standard was passed to the new Authority, which is thus faced with much the same difficulties as beset the Railway Executive. It will be interesting to see which of these bodies will be the first to reach a satisfactory understanding with the National Coal Board about improving the quality of coal and keeping its price on a fair level.

* * * *

South African Railways Overseas Mission

SOUTH AFRICAN RAILWAYS is the short title for an administration which controls all types of transport in the Union—rail, harbours with some shipping, road, and air. On a small scale the administration discharges the duties entrusted to the British Transport Commission and to our three air corporations. Happily, it is free from the complication of Executive Boards. Each of the seven main branches of its work is controlled by a Manager who is responsible directly to the General Manager. In this way authority is delegated freely and the General Manager can devote his time to questions of policy and the general direction of affairs.

After contributing on an impressive scale to the national war effort, the administration is faced with the task of modernising the South African transport system to cope with the expansion of agriculture, of mining activities and of other industries. New railway lines will be required and road motor services will have to be extended, both for passenger and goods traffic. The carrying out of numerous proposals, which have been put forward for improving traffic facilities, will entail a large expenditure spread over a period of years, and much of the material and equipment required will have to be imported. It was therefore decided to send a Mission representative of the principal departments overseas to study the latest trends in transport development and examine the sources of supply of railway material.

The Mission was led by Mr. D. H. C. du Plessis, Chief Harbour, Shipping & Development Manager, who had with him nine officers specialising in operating and commercial problems; in electrical, mechanical, and signalling engineering; and locomotive running and dock and marine work. Seven months—from March to September, 1946—were spent in visiting the United Kingdom and Northern Ireland, Holland, Belgium, Sweden, Switzerland, the United States, Canada, Argentina, and Brazil. On his return to South Africa, after travelling about 50,000 miles, Mr. du Plessis submitted a comprehensive report* on the general inquiry, covering summaries of the conclusions and recommendations initiated by his colleagues. The report runs to 70 large pages of print and cannot be dealt with exhaustively in a single article, but some of its main topics are mentioned in the paragraphs below. Obviously the Mission took great pains to investigate the matters remitted to them and gained an experience which is bound to be of considerable benefit to the South African Railways.

The Mission paid close attention to the general organisation of transport undertakings in Great Britain and America. For South African conditions, the divisional system of managerial control now in force appeared to be the most suitable arrangement. The 13,000 odd miles of railway in the Union are divided into nine systems, with a System or Divisional Manager in charge of each, reporting direct to the General Manager. This set-up resembles the organisation of the former L.N.E.R., which was also like the South African Railways in having large dock estates.

A significant commentary on the intention of the British Transport Commission to transfer railway-owned docks from the Railway to the Docks Executive is the opinion expressed emphatically by Mr. du Plessis that "the fact that the railways and harbours form part and parcel of the same transport undertaking has been the means of saving South Africa large sums of money, in that it has been possible to co-ordinate the development of harbours with the expansion of the railway network."

The report recommends various changes in departmental organisation. At large goods and passenger stations, such as Kazerne (Johannesburg) and Germiston, it is suggested that terminal managers be placed in charge with disciplinary and other powers appropriate to a sub-divisional office. This arrangement should improve the efficiency of the station work, while relieving the divisional offices of detail business and saving time in dealing with the public. Another proposal is to appoint parcels traffic supervisors at the principal stations to take charge of the parcels offices and increase business by cultivating public relations. It is also recommended that arrangements should be made to undertake household removals on the system followed by the British railways.

Two members of the Mission, Mr. G. C. Bell, Locomotive Superintendent, and Mr. J. A. Kruger, Chief Clerk, General Manager's Trains Office, studied the methods of controlling engine power from a mechanical and operating point of view, respectively. They both liked the practice of the former L.M.S.R., and Mr. du Plessis supports a recommendation that divisional motive-power controllers be appointed, with a supervising control at headquarters. He likewise thinks that consideration might be given to the establishment of a "shunting analysis committee" on each division to examine the work performed by trains, engines, and staff.

After examining the L.M.S.R. research arrangements, it was considered that these had advantages over the system whereby research is undertaken in different departments of the South African Railways. The present methods are apt to lead to waste of energy and lack of continuity, while the best use cannot be made of research equipment and staff. Mr. du Plessis thinks that the whole of the research work of the administration might be concentrated in two sections under the directive control of the Deputy General Manager. One section would deal with engineering subjects and the other with commercial and operating questions.

Overseas the Mission did not find any staff negotiating machinery more effective than their own instruments. They appear, however, to have misjudged the amount of attention

* South African Railways—Report of the Overseas Mission (1946), compiled by Mr. D. H. C. du Plessis, Chief Harbour, Shipping & Development Manager, Johannesburg, Chairman of the Overseas Mission, and printed in the Union of South Africa by the Government Printer, Pretoria. Price 12s. 6d.

given by the British railways to the training of staff. The report says that "with the exception of the L.M.S.R., the British railways have done very little in the way of providing departmental facilities for the theoretical training of their staff" though it mentions that "the G.W.R. affords senior members of the clerical staff facilities for attending . . . the London School of Economics." Actually, the main-line companies did a great deal for the education of their staff of all departments, as indeed did the London Passenger Transport Board. The L.M.S.R. was singular only in setting up a school at Derby, which had not time to get fully into action before the war. The other companies did not attempt to centralise their educational arrangements, but all of them sent men freely to the London School of Economics and to provincial universities.

Equally wide of the mark is the finding that "very little is done by the railways visited overseas with regard to any specialised scheme of training members of their staffs for the higher administrative positions." The Mission cannot have appreciated that the traffic apprenticeship schemes, mentioned in its report, were designed to prepare the best of the younger railwaymen for promotion to key positions. The list of appointments made by the Railway Executive since nationalisation is proof that these schemes were successful. Nearly all the traffic posts have been filled by men who passed through a traffic apprentices' training, or an equivalent course of instruction, at an early stage of their careers.

Despite these misunderstandings, we are glad to see that the report favours the continuation of a "transportation pupil" scheme in South Africa and suggests that university graduates should be eligible for admission to it. Other judicious proposals are that the practice of sending young engineers overseas to widen their experience should be put on a more extensive basis, that young operating and commercial officers be sent abroad to study specific problems and that South Africans be selected from the catering department for training overseas in hotel business.

Altogether the report raises a series of knotty problems for the South African Railways' administration to consider. There will be no room for doubt about the views formed by the members of the Mission as, in setting out their opinions, Mr. du Plessis always goes straight for the bull's-eye.

* * * *

Prevention and Destruction of Weeds on the Permanent Way

IN the course of a year, permanent way maintenance gangs spend a considerable amount of time in clearing the tracks of weeds that have obtained a foothold in the ballast. The present acute shortage of labour has increased the difficulties of keeping the road in good condition, and practical measures for arresting the growth of weeds are worthy of consideration. A number of suggestions, based on many years of experience as a length ganger, were advanced by Mr. F. Wensley, in his paper on "Prevention and Destruction of Weeds on the Permanent Way," at the meeting of the South Wales Section of the Permanent Way Institution, held at Neath on March 20.

It may be assumed that the soil used for the formation of railway embankments contained the seeds and roots of many perennial weeds, which soon showed themselves in the ballast and cesses and became an increasing source of trouble to the maintenance gangs. So deeply-rooted are these plants that ordinary hand weeding may fail to eradicate them. Indeed, the light use of a weeding tool serves only to prune the roots, and an even more luxuriant crop results. If deep digging is undertaken, it is most important to remove the roots of perennials completely, as any fragments which remain are encouraged to grow by the disturbance of the ballast, and by having fresh soil placed round them.

The expedient of renewing the ballast has been tried on certain lengths, where perennial weeds have become particularly troublesome. This has not always had the desired effect, as the new material appears to have acted as a fertiliser, and, after a comparatively short interval, the laborious work of hand weeding has had to be resumed.

Annual weeds, although not so deeply-rooted as many perennials, call for special attention, as they grow quickly, and seed profusely. Certain hardy types may even continue to flourish throughout the winter. Three of the commonest varieties, ragwort, sow-thistle, and groundsel, have light airborne seeds, which can be scattered over a wide area by the wind raised by passing trains. Seeds of this type tend to settle in cuttings, where there are pockets of relatively still air. Plants bearing an "explosive" type of seed pod scatter their seeds over a restricted area, but they multiply quickly, and a heavy crop of weeds results.

It is of the utmost importance to prevent annual weeds from seeding, as a single plant may produce as many as 40,000 airborne seeds. Moreover, many weeds mature rapidly, and flower and bear seeds within three weeks of their first appearance. In dry weather, light digging with a weeding tool is sufficient to cause most lightly-rooted annual weeds to wither, but if the season is wet, they should be removed from the ballast, or they may take root again and recover. Airborne seeds also can reach the track from neglected land adjoining the railway, over which the maintenance gangs have no control.

The grasses growing on embankments and the sides of cuttings can give serious trouble, if they are allowed to seed on to the ballast. This can be prevented by cutting the grass early in the summer, before the seeds have formed. A second cutting, in August or September, is advisable, to prevent late seeding. The wisdom of allowing the grass to mature, to provide a crop of hay, may be questioned, as it is impossible to prevent some of the seeds from reaching the ballast. If the grass crop is cut and burnt on the banks, the bare patches caused by the fires encourage the growth of weeds. Not only do airborne seeds have unimpeded access to the ground, but the fertilising action of the ashes stimulates their growth.

Decaying vegetable matter in the ballast encourages the growth of weeds, and every effort should be made, in the autumn months, to clear fallen leaves from the track. Also, the seeds of many trees growing beside the railway germinate readily in the ballast, and develop quickly into small bushes. These seedlings can be uprooted easily, but, like annual weeds, they should be removed at once in wet weather, or they will revive.

The disposal of old and dirty ballast has an important bearing on the problem of weed prevention. This material contains thousands of seeds, which will grow readily if the ballast is tipped down a railway embankment, or left lying in heaps by the lineside. It may not be realised generally that many airborne seeds are carried by the wind into tunnels, where they become coated with soot, and lie dormant until the ballast is removed. The practice of removing spent ballast to a dump has much to commend it.

Of equal importance is the disposal of weeds that have been removed from the ballast. Experience has shown that it is preferable to collect them into large rather than small heaps, so that the area over which seeds are scattered may be reduced to a minimum, and there is less chance of weeds being overlooked when they are cleared away. The loose soil removed with the weeds should not be left in heaps, which will become nurseries for more weeds, but should be scattered.

The introduction of weed-killing trains, fitted with chemical sprayers, has alleviated considerably the task of the maintenance gangs, but it is not always easy to find paths for these trains on lines that carry a heavy traffic. Moreover, if the weed-killing unit has to cover an extensive district, it may not be possible for it to operate on a particular section of line before the weeds have seeded. The provision of additional units would go far towards solving this latter problem, particularly on lines where the traffic is relatively light.

Additional assistance could be afforded by the use of chemical weed-killer by the maintenance gangs. It has been suggested that particularly obstinate patches of perennial weeds could receive intensive treatment in this way, when the remainder of the length does not require spraying. In this connection it may be noted that weed-killing powder, packed in tins with perforated lids, has been used successfully in places which cannot be reached by the sprayers. It has been suggested also that the growth of perennial weeds could be checked by spraying or dusting the under ballast when relaying is undertaken. On the other hand, a proposal for mixing powdered weed-killer with new ballast, before it is delivered to the site, appears to be impracticable, as the new material would have to be kept dry until it was laid.

LETTERS TO THE EDITOR

(The Editor is not responsible for the opinions of correspondents)

Railwaymen's Aid to Blind Travellers

9-11, Park Crescent,
Regent's Park,
London, W.1. March 31

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—May I thank all railway workers for the kindness and courtesy they show to St. Dunstan's men who travel from their homes to St. Dunstan's various establishments, or on other journeys. I was in South Africa at Christmas so could not write my usual letter, but Easter is a good time to say "thank you" for all the kindness we receive, especially when we travel alone.

Yours sincerely,
IAN FRASER,
Chairman, St. Dunstan's and the Scottish National Institution, Edinburgh

Locomotive Exchanges

18, Wheatsheaf Close,
Woking, Surrey. March 29

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—The Railway Executive's forthcoming locomotive trials undoubtedly are going to arouse much interest among both professional and amateur locomotive men. The results no doubt are going to be very close, though somehow I think the L.M.S.R. "Duchess" and the S.R. "West Country" have things a little bit in their favour. I am not a G.W.R. fan, but I am nevertheless disappointed that its locomotives are not being given a better chance. Why is no G.W.R. engine to be tried on the L.M.S.R.? Is it because of loading-gauge restrictions? It seems strange that a "King" should be selected for the trials, as I always regarded "Castles" as superior in all respects except power.

It is to be hoped that, perhaps, the trials could be extended later and that "Royal Scots," "Castles" and "Lord Nelsons" could be matched against one another. Although the "Lord Nelsons" are twenty years old and can only muster 16, they seem to have all the necessary characteristics of a modern main-line locomotive.

Yours faithfully,
J. B. LATHAM

Transportation

The Railway Executive (Eastern Region),
Wellers Court, Pancras Road,
London, N.W.1. April 2

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Your two articles on pages 366 and 367 of your issue of March 26, I have no doubt, will cause a lot of interest to those of us who have now returned to civil employment, and who during the war period were members of Transportation & Movement Control.

Many of us during World War II formed ideas on the rightness of having three separate organisations for dealing with transport matters which were closely allied, if not interwoven with each other.

I refer to Transportation, Movement Control, and Sea Transport officers. The former includes dock working, operating, platelaying, workshops, bridging, stores, etc. The second, although belonging—as Transportation troops do—to the Corps of R.Es, are, in the main, staff officers under the Q.M.G.; the lower-ranking officers being staff embarkation officers and railway traffic officers, whilst the higher ranks are D.A.Q.M.G., A.Q.M.G., etc.

Abroad, E.S.Os and R.T.Os worked in the very closest relationship and proximity with Transportation troops, particularly in the docks, at key stations, and in marshalling yards; and in many cases this resulted in duplication of returns and documents to a quite unnecessary degree.

I also refer to sea transport officers, who, to the best of my knowledge, are the only officers without other ranks to assist them except for office work, much of which is done by the W.R.N.S. if the theatre of war allows it. They, of course, belong to the Minister of War Transport, and for disciplinary purposes are placed under the orders of senior Naval officers in charge at any particular port. Their work is very essentially closely related to that performed by the dock companies, and, in fact, it is perfectly true to say that in many theatres of the last war, dock officers took the responsibility of loading and unloading, and safety of the ships whilst carrying out these functions, without S.T.Os being present, although it is laid down that this is the prime reason for sea transport officers' appointments.

Surely common sense must indicate that three functions, *i.e.*, Transportation R.Es, Movements, and S.T.Os, all working in a large dock area, should be under one command, and not have three separate heads.

Amalgamation did, in fact, take place as far as Movements and Transportation were concerned in the Middle East on July 1, 1941, in regard to dock areas, etc., with one A.Q.M.G.; and after certain initial edges had been smoothed, worked very efficiently and satisfactorily together.

In North Africa, whilst Movements and Transportation had two separate headquarters, in the port area they were virtually amalgamated under the Port Commandant. The Port Commandant was always a Staff Officer, and he was responsible for the whole of the working in the port area with the exception of safety of ships, which was a S.T.O. responsibility; but even here all three of us were housed together on the principal quay at Algiers, and were continually in and out of each other's offices, so that virtually there was a unified command.

Many of us will have had experience of the American system of transportation, and I would like to suggest that possibly a modified form of their organisation might well be the best solution for the future.

Now is obviously the time to consider matters of this sort, before the War Office asks the railways to allow their officers to go to fortnightly camps, as was done from 1925 up to the commencement of hostilities in World War II.

Finally, I would like to say that it is quite impossible to undertake an offensive without a nucleus of what one might call "civilian" soldiers, and I think I am right in saying that in France in 1939-40 there were no more than five or six serving Sapper officers, all at H.Q., in Movement and Transportation; whilst all the ports, railway stations, and marshalling yards which were covered by the B.E.F. were run by officers drawn from the main-line companies, shipping and transport undertakings. It is therefore important, I think, that civil transportation should have a say in the make-up of this important branch of War Office organisation.

Yours faithfully,
N. MCK. JESPER,
Chief of Police

Railway Station Design

Hove, 4. March 27

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I have been interested and not a little amused by the correspondence under this heading in your recent issues.

Does Mr. Parkes seriously suggest that the stations he mentions in his letter of March 13 (published in your March 26 issue) would be anything but filthy with or without over-all roofs, seeing that they are in the centres of some of our dirtiest cities?

Also, would he include among those "hanging about" the thousands who have to change and wait for connecting(?) trains at the many provincial covered-in stations?

His original case seems to require a few slight qualifications, though its financial argument is doubtless incontestable.

Yours faithfully,
F. S. B.

Big-Engine Policy

7, Coates Place,
Edinburgh, 3. April 5

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I have read with interest your editorial on "Big-Engine Policy" in your issue of April 2, and as one who has spent much of his spare time during the last 24 years in the timing of passenger trains from the operating point of view, I should like to make two comments on this subject arising out of my own observations.

Looking back over my records, it is interesting to notice how the advent of the large engine, with its heavier train, has given rise to increased frequency in overtime at stations for taking water, with consequent reaction on following trains. This has been especially noticeable when trains follow each other in rapid succession, overtaxing the supply of water from the water troughs, and thus necessitating out-of-course stops for watering purposes.

In the second place, the big-engine policy, in so far as it affects passenger trains, would appear to have resulted in an increase in the loss of time which can be credited to signal delays. The increased length of train which a large engine can haul means an increase in the length of time necessary to release the vacuum brake, with the result that, so far as my

observations go, much time is lost even after what would have been, with a lighter train, a slight signal check.

Frequently, heavy trains on which I have travelled have been brought to a dead stand shortly after passing a distant signal at "caution," and even on occasions before it was reached, as a result of the time lag in releasing the brake on such trains. I have known this to happen on a straight road when all stop signals were cleared just after the engine had passed the distant at "caution." Such excessive loss of time undoubtedly reacts unfavourably on following trains if they are close behind, and this would tend to decrease line capacity rather than increase it.

My own observations, so far as passenger trains are concerned, would seem to confirm your view that the advent of the big engine has tended to the slowing down of traffic; while so far as my data allows of any judgment, it would appear doubtful if the timekeeping of passenger trains has been improved greatly as a result of this factor in operation.

Yours faithfully,

T. L. JEHU

Livery of British Railways

64, St. Albans Road,
Seven Kings, Ilford. April 3

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Regarding Mr. Powell's letter published in your issue of April 2, in which he expressed the view that it was unnecessary to adorn the sides of locomotives with the title "British Railways" in full, or for that matter with any insignia of ownership whatsoever, I would like to point out that on his own system, Burma Railways, the initials "B.R." are painted on tank and tender sides; and indeed, on Garratt locomotives operated by the system, the initials appear both on the leading water tank and rear tender. Perhaps, however, Mr. Powell does not have a say in this particular department.

I frankly admit that I was surprised when locomotives appeared with "British Railways" painted on them, and quite expected the initials "B.R." to apply in this country as well as in Burma, there being no possibility of confusion between the two systems! Now that it appears to be standardised, I admit that I prefer it, and support the view of other correspondents in its retention.

The point of standard of cleanliness also has been raised by numerous correspondents in recent weeks, and in this respect I think there is much to be done. Your correspondent, Mr. Wells, mentions in a letter published in the April 2 issue, that the Southern Region has a standard of cleanliness second to none, with which I wholeheartedly agree, but adds that it would seem unfair to single out one or two places for special mention. To my mind, the worst offender in this respect is the Eastern Region, particularly on the lines from Liverpool Street. An example which comes to mind is the present condition of the three "L1" 2-6-4 tanks, delivered earlier this year in a resplendent green livery, but which are now rapidly sinking to the general begrimed appearance of ex-G.E. section locomotives.

I would like to have a reply through your columns from the Press Relations Officer of the Eastern Region to explain why the general standard of cleanliness of the Eastern Region is so low as compared with locomotives of the other regions, particularly the Southern.

Yours faithfully,

RAYMOND M. PALMER

Stephenson Valve Motion

10, Woodhall Place,
Thornbury, Bradford. April 2

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—I have been much interested in the correspondence in your columns on this subject, and agree with Mr. Harris that, by designing the gear with long travel valves, facilitating the expansive use of steam in short cut-off working, efficient working closely comparable with that obtained from similar locomotives fitted with Walschaerts gear may be obtained. An outstanding example of this was the redesigning of the valve gear of the ex-Great Eastern Railway "1500" class 4-6-0 engines by Gresley. In their rebuilt form these engines can be worked at short cut-offs with just the same facility as the "B1" and "B17" class 4-6-0 engines fitted with Walschaerts gear; and cut-offs as short as 15 per cent. are used regularly. Although these engines did admirable work in their unrebuilt form, the redesigning of the front end enabled them to carry out their duties with much greater efficiency; in fact, they were preferred by many drivers to the larger and very capable Gresley "B17" class 4-6-0s. The similar case of the rebuilt "Claud Hamilton" 4-4-0 engines on the same line is also a case in point.

Whilst all the most exceptional ultra-high-speed records certainly are held by locomotives fitted with Walschaerts gear, it should not be forgotten that both the Great Western two-cylinder "Saint" class 4-6-0s and the three-cylinder Raven Atlantics showed themselves capable of sustaining speeds of 75 to 80 m.p.h. on level track with loads of about 250 tons. These engines were fitted with Stephenson's link motion, without the refinements of long-travel valves and streamline steam passages which have been evolved in later years. On the score of very high speeds, also, one can call to mind speeds of 90 m.p.h. and over being reached by Great Northern Atlantics, Great Central "Directors," and Great Western 4-4-0s; in addition to the Great Northern of Ireland simple 4-4-0s and Great Eastern rebuilt 4-6-0s which have the advantage of long-travel valves.

Whether or not the Great Western 4-4-0 *City of Truro* actually reached the 102·3 m.p.h. claimed whilst descending Wellington Bank may never be proved conclusively, but it is tolerably certain that this engine was the first in these islands to approach closely or attain 100 m.p.h., and this engine, of course, was fitted with Stephenson's link motion.

Yours faithfully,

GEORGE W. CARPENTER

"De Minimis"

London, S.W.1. April 8

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—On page 416 of your April 2 issue, the account of Sir Cyril Hurcomb's visit to Swindon mentions that 2,000 more wagon repairs a year will be done when some work performed in the open is transferred to a shed. In a normal year the G.W.R. repaired 228,000 wagons. A change which adds less than one per cent. to the number may be of moment to the Railway Executive's staff engaged in "chasing" wagon repairs, but is surely too trifling to concern the Transport Commission.

Yours faithfully,

PROPORTIONALITY

Standard Gauge for Africa

4, Gordon Street,
London, W.C.1. April 5

TO THE EDITOR OF THE RAILWAY GAZETTE

SIR,—Based on data I collected some twenty years ago in the course of an investigation on the construction and development of overseas railways, I venture to submit the following comments on the correspondence published under the above heading in your issues of March 5 and April 2.

In the first place, I am afraid that as the average tare weight for African metre- and 3-ft. 6-in. gauge goods wagons amounts to approximately 45 per cent. of their carrying capacity, the average load-to-tare ratio falls much below that claimed by Mr. Powell in his letter of March 8 (April 2 issue) for these gauges, and approximates to the value for standard and wider gauges.

On the other hand, I concur with Mr. Powell that the difference in cost between 3 ft. 6 in. and standard gauge is likely to exceed the 10 per cent. estimated by Mr. Husband in his letter of February 23.

Making certain assumptions, I ascertained at the time that for a given single-track railway and for equal traffic volume, the difference in first cost, excluding rolling stock, between 3 ft. 6 in. and standard gauge was 18 per cent. in favour of the former.

At present, traffic conditions in overseas territories would not warrant high speeds on a large scale. For the bulk transport of local exports to the coast, or of imported manufactured goods to their inland destination, high speeds are not only unnecessary, but also slightly illogical. What is the use of saving say 2 to 3 hr. on the railway if the transport by sea lasts as many weeks?

Where high speeds are necessary, they are required only for the convenience of a very limited number of passengers travelling over considerable distances—passengers catered for adequately by existing or future airlines as well as possible overland bus routes.

In addition, the introduction of diesel railcars and diesel-electric train services such as have been developed on the metre-gauge lines in Tunisia, should go far to meet local requirements. The electrification of the South African Railways provides an outstanding example of how to modernise a given 3-ft. 6-in. gauge line, enabling it to meet the heaviest traffic demands.

Yours faithfully,

C. CARTY

The Scrap Heap

DAVID AND GOLIATH

L.M.R. = Longmoor Military Railway or London Midland Region.

* * *

A SATISFIED PASSENGER

On the passing of the Great Western Railway into history and the Western Region, I would like to state my experiences as a regular passenger on the old system.

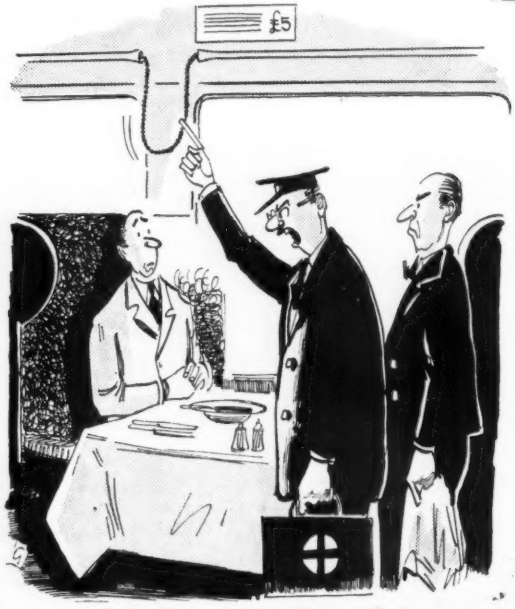
In thirty-four years I have travelled 700,000 miles and never been involved in or even witnessed an accident. Out of 3,000 meals taken in restaurant cars not one has ever given me a stomach upset. I have never met with any discourtesy from an official or an employee, and only once have I failed to reach my destination in a reasonable time, and that was at the time of the blitz when a section of the line was damaged and a considerable detour had to be made. I hope it will be as pleasant and safe to travel on a State-owned railway.—*Letter from Mr. Edward James in "The Daily Graphic."*

* * *

100 YEARS AGO

From THE RAILWAY TIMES, *April* 15, 1848

NEW NARROW-GAUGE ENGINE.—A powerful narrow-gauge locomotive, with an extreme breadth of something like 9 feet 4 inches on the 4 feet 8½ gauge! is in course of construction at Wolverton on a plan recommended by Mr. M'Connell, the locomotive superintendent. The firebox overhangs the rails about 7 inches on either side, and is 5 feet 5 inches in height, as in length. The centres of the cylinders, which are outsides of 20-inch stroke, are 7 feet 6 inches apart. The driving wheels are 6 feet in diameter. The top of the boiler is 7 feet 9 inches from the rail. The distance between the leading and driving wheels is 6 feet 8 inches, and the distance between the extreme bearings 17 feet 2 inches. In spite of these formidable looking measurements, Mr. M'Connell expects that this engine will run steady at high velocities.



". . . and in future, if you have a fly in your soup don't panic—simply ring for the waiter . . ."

"LOST WATERLOO"

Lord Hacking wrote to *The Daily Telegraph* recently to ask whether the "foolish practice" of replying "British Railways speaking" to telephone calls at Waterloo could not be stopped. He said it would be more helpful to know he was speaking to Waterloo Station. The following are some of the rejoinders to his letter from other correspondents:—

To the Editor of "The Daily Telegraph"

SIR,—The reply of "British Railways, Southern Region," by telephone operators at Waterloo to the public is not so foolish as Lord Hacking seems to think.

If they replied "Waterloo" only, it would be useless to members of the public who are ringing up to make inquiries about train services to and from other "Southern" London termini, *i.e.*, Victoria, London Bridge, Charing Cross, and Cannon Street. All these stations are served by "Waterloo 5100," so that the public need use only the one number.

As a matter of interest, on dialling Whitehall 4813 recently, one of the telephone numbers of the Travel Association of which Lord Hacking is chairman, the only reply received was "Hullo."

Yours truly,

G. WYNNE DAVIES,
Acting Public Relations & Advertising Officer, British Railways

To the Editor of "The Daily Telegraph"

SIR,—The other day I rang up Paddington and fared better than did Lord Hacking at Waterloo. The reply I received was, "This is Paddington Station at your service"; which was both courteous and precise. Other stations would do well to copy.

Yours faithfully,

BARBARA MAY

To the Editor of "The Daily Telegraph"

SIR,—The day before Lord Hacking's letter appeared I telephoned to Waterloo. The reply I received was, "Southern Region. Can I help you?" They did.

Yours faithfully,

WALTER DOONE

* * *

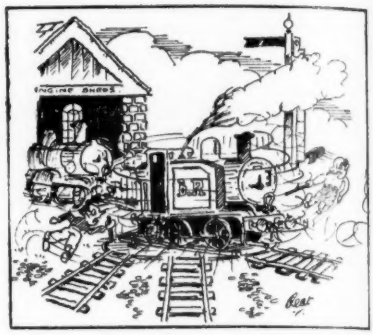
SOCIALISED SALARIES

Mr. Shinwell said at Bradford: "A time must come—I am not threatening anybody—when the people who accept positions of authority must be prepared to operate on salaries regarded as reasonable and no more.

In an interview at Leeds he said: "The salaries of many administrative officials in our nationalised industries are out of proportion.

"The trouble, for instance, with the Coal Board is that it had to take over many officials who had existing contracts with the coal owners.

"The majority of them are now minor officials, but we had to take over the contracts, and as many were paid very high salaries with expense accounts, the whole range of salaries within the Coal Board had to be fixed far higher than should have been necessary. When the contracts expire there should be a reduction in salaries all round."—*From the "Daily Express."*



". . . Of course, there are limits to this 'quicker turn-round' business, Alf. . . ."

* * *

Mr. Morgan Phillips, General Secretary of the Labour Party, told a meeting of Labour Party representatives and trade unionists at Birmingham that the 1947 membership of the party totalled 4,685,699—a record. It had only twice before been over 4,000,000, namely, in 1920 and 1921.

* * *

FIRST THINGS FIRST

The impression that in paying so much attention to locomotive and rolling stock colour schemes, the Railway Executive is publicising a matter of secondary interest to the average traveller is endorsed in the current issue of *The U.R.S. Opinion* (official organ of the Union of Railway Signalmen). "Cameo" writes: "The fact that one has stood for four or five hours in a crowded corridor, the colour of which is a beautiful rose pink, does not make one feel any the less tired and irritable, neither will it afford any compensation to a business man late for an appointment through engine failure, that the engine was coloured a beautiful blue." "Cameo" would feel stronger interest in an announcement of improvements in uniform, and suggests "Brighter Staff for Brighter Trains."

* * *

THE IDEAL RAILWAY FOREMAN

The railway mechanical supervisor needs to be a paragon, as the following summary of the view taken by mechanical shopmen about supervisors in general would appear to indicate. It comes from the Taylor-Forge Club in Chicago:—

If he is pleasant, he is too familiar.
If he is sober-faced, he is a sourpuss.
If he is young, he doesn't know anything.
If he is old, he is an old stiff.
If he belongs to a lodge, the members expect favours.
If he goes to church, he is a hypocrite.
If he doesn't, he is a heathen.
If he drinks, he is an old souse.
If he doesn't, he is a tightwad.
If he talks to everybody, he is a gossip.
If he doesn't, he is stuck up.
If he insists on shop rules being kept, he is too particular.
If he doesn't, he is too careless.
If he looks around, he's snooping.
If he doesn't, he's unobservant.
If he tries to settle all complaints, he must have the wisdom of Solomon.
If he worries about them, he'll soon be crazy.
Are there any good supervisors?
Yes, plenty of them, and they're not all in cemeteries.

From the "Railway Mechanical Engineer."

OVERSEAS RAILWAY AFFAIRS

(From our correspondents)

RHODESIA

Proposed Connections with British Port

It has been suggested by a Kenya Government spokesman that the Tanganyika and Rhodesia Railways systems might be linked in the comparatively near future. This statement followed the Kenya legislature's approval of proposals for the amalgamation of the Kenya & Uganda Railways system with the Tanganyika Railways [see *The Railway Gazette* of April 9. —ED. *R.G.*] The suggested link-up would provide Northern and Southern Rhodesia with an all-British railway route to a British port. One proposal is that the line should pass round the north end of Lake Nyasa; and the other that traffic should cross the lake by a ferry.

Another possible railway connection mentioned, in addition to the proposed Sinoia-Kafue cut-off recently reported (see *The Railway Gazette* of February 13) is the construction of a line to close the gap between Beit Bridge and West Nicholson; and another line from Odzi to Umvuma.

Inquiries indicate, however, that some of the proposals at present being publicised are based on individual preferences rather than on a survey of the economic position. Nevertheless, greatly increased transport facilities—both road and rail—will be an essential part of the unprecedented development now taking place in the African provinces north of the Union.

INDIA & PAKISTAN

Unrest Among Railway Workers

Following the decision to retrench surplus men, railway workers in Lahore and elsewhere have been holding demonstrations, resulting in general unrest among labour. Of a total surplus of 11,000 Indian State Railways employees who had opted for Pakistan, 3,000 subordinate grade and 230 superior grade have been absorbed in the North Western Railway, while the remaining 8,000 are to be retrenched and face the prospect either of staying in Pakistan and finding employment in other Government departments or going back to India. "Nearly 700 have already gone back," Mr. F. M. Khan, the General Manager of the North Western Railway, told a Press conference recently.

In reply to a question, Mr. Khan said that the workers' union, represented by Mirza Ibrahim, having used methods not entirely constitutional to press its demands, was not to be recognised. Mirza Ibrahim was arrested a few days later. The General Manager also stated that from August 15, 1947, to February 20, 1948, Pakistan received 14,285 wagons of coal, as compared with its normal requirement of 26,030 wagons.

Strike at Lucknow

About 8,000 workers of the locomotive, carriage and wagon workshops of the East Indian Railway, at Lucknow, downed tools after lunch on March 17 as a protest against the Pay Commission's award. On the next day, the strike spead to the power house, resulting in a complete blackout at Lucknow Junction.

A section of the strikers picketed the locomotive running shed and prevented the refuelling of locomotives. Drivers who attempted to break the cordon of pickets were stoned. The 6 down "Punjab Mail," the up "Punjab Express," and the Faizabad passenger trains consequently were detained at Lucknow for from 1 to 4 hr.

The strike lasted nearly a fortnight, at the end of which about 4,000 workmen of the locomotive shop at Charbagh returned to work, and a general resumption of work followed.

Re-Grouping of Railways

A senior railway officer has been on special duty for some time to formulate a scheme for the re-grouping of railways which were affected by the partition arrangements. It is stated that the Eastern Punjab Railway, having no workshops and a route-mileage of less than 2,000, could not exist indefinitely as an independent unit. It was proposed, therefore, to merge it with the three upper divisions of the East Indian Railway and the corresponding portion of the Oudh Tirhut Railway in the United Provinces. Proposals for grouping the balance of the East Indian Railway with the rest of the O.T.R. and certain parts of the B.N.R.; and for combining the Madras & Southern Mahratta and the South Indian railways, also have been under examination.

First Class to be Abolished

During the discussion of the railway budget in the Indian Parliament, the Minister for Transport announced that a decision had been taken to abolish first class on Indian railways. The capacity so released would be used for putting more third class coaches or parcel vans into service. Future classes of travel in India would correspond to the present second, inter, and third, with considerable improvements over existing standards. He expressed his keen awareness of the uncomfortable conditions under which third class passengers now travelled, and promised to spend whatever money there was in the betterment fund to remove these discomforts.

CEYLON

Peradeniya Bridge Restored

The bridge across the Mahaweli Ganga at Peradeniya, which was washed away completely during the August floods (see *The Railway Gazette* of January 2) has been repaired and replaced, and the track restored. The train service to Kandy was resumed on March 1.

Closing Udapussalawa Line

The picturesque metre-gauge line running at an altitude of 6,000 ft. from Nanu Oya, through Nuwara Eliya, to Ragalla, past tea estates, waterfalls, and the scenic splendour of the Upcountry, was closed on March 1. Out agencies have been established at Nuwara Eliya, Kandapola, Brookside, and Ragalla for the receipt and despatch of goods and parcels. Passengers continue to be booked between these out agencies and other railway stations, being conveyed by bus to and from Nanu Oya.

Housing Scheme for Railway Workers

A landmark in the progress of welfare work among railway workers was the rapid completion of the housing scheme referred to in *The Railway Gazette* of July 4. U Tin Tut, Foreign Minister of Burma, who represented Burma at the Ceylon independence celebrations, declared the scheme open on February 18. Mr. Bodger, General Manager of the railway, drew attention to the startling difference between the railway "lines" for workmen 60 years ago and the splendid modern buildings.

Colonel J. L. Kotalawala, Minister of Transport & Works, in expressing his gratification at the fruition of the scheme, said that it was an example for the rest of the island.

MALAYA

Railway Ordinance, 1948

By Clause 145 of the Federation of Malaya Agreement, 1948, the undertakings formerly known as the Federated Malay States Railways and the Johore State Railway have been vested in the Chief Secretary for the purpose of the Federal Government, and are now known as the Malayan Railway. Hitherto, a number of Railway Enactments and a Railway Ordinance were in existence. These have been replaced by a new Railway Ordinance, 1948, which revises the previous law. It provides for the appointment by the Government of a General Manager of the railway, and the creation of a Railway Board to advise him on such matters as rates and charges, estimates, new construction, and major questions of policy in connection with the working or management of the railway. The Railway Board consists of the General Manager as Chairman, the Finance Secretary, the Commissioner for Road Transport, and seven other members appointed by the Chief Secretary.

In dealing with the powers and duties of the railway administration, the new Bill, for the most part, follows existing law, with amendments and extensions taken from the Gold Coast Ordinance. By its provisions, the railway administration is empowered to construct and run railway lines; to provide and maintain stations, hotels, and catering arrangements; to erect and work telegraphs and telephones along the railway; to carry letters; to provide means of transport; and to exercise the other powers required by a railway.

WESTERN AUSTRALIA

Financial Results

The financial results for the quarter and half year ended December 31, 1947, compared with the corresponding periods of 1946, recorded an increased deficit, as shown in the table below:—

	Three months ended December 31		Six months ended December 31	
	1946	1947	1946	1947
	£	£	£	£
Earnings ...	904,100	1,150,600	1,914,200	2,311,300
Working expenses	1,015,200	1,324,623	2,094,293	2,591,513
Deficiency	111,100	174,023	180,093	280,213
Interest...	257,500	261,300	515,000	521,400
Loss ...	368,600	435,323	695,093	801,613
	Per cent.	Per cent.	Per cent.	Per cent.
Operating ratio ...	112·29	115·13	109·41	112·12
Percentage p.a. on loan capital Loss ...	5·58	6·51	5·27	6

The comparison is affected by the fact that in November, 1946, railway operations ceased for 16 days during the period of the enginemen's strike. However, allowing for this, earnings showed a satisfactory increase, although working costs continued to rise at an alarming rate, and at the present time it is impossible to forecast when the rise in expenditure of this kind will be arrested.

In this connection the Commissioner of Railways, in his annual report for the year

ended June 30, 1947, again drew attention to the recommendations made in his 1944 and 1945 reports, *i.e.*, that the conditions for ensuring increased revenue are: (*a*) Raising of charges; (*b*) the crediting of railway revenue in respect of services rendered at less than cost; (*c*) an annual grant to cover losses on developmental branch lines; (*d*) the reduction or elimination of interest; or (*e*) a combination of any or all of these. Up to the present the Government has not announced its policy in regard to these recommendations.

CANADA

C.P.R. Rates Exemption in Winnipeg

The city of Winnipeg is moving to repeal a by-law passed in 1881 which gave the Canadian Pacific Railway permanent exemption from city taxation. These steps were recommended in a report by a special counsel engaged by the city to investigate the whole question of tax exemptions in Winnipeg. The report says: "It is submitted that the city of Winnipeg has sound and meritorious grounds on which to base an appeal to the provincial government for remedial legislation." Only 131 persons voted on the by-law in 1881, with 130 in favour and one against. The by-law exempted the C.P.R. from city taxation in perpetuity, the railway in turn committing itself to maintain its principal stockyards and workshops in the city.

Local officials question the moral and legal right of any council to pass allegedly unrepealable legislation that would bind all future councils. In 1881 Winnipeg had a population of approximately 8,000, and the report says that there must have been several thousand voters on the list. Therefore, "it seems monstrous to us that 130 voters could forever have exempted the property of the C.P.R. from taxation by the City of Winnipeg." It is added that there is good precedent for over-ruling agreements made between a public authority and a railway company.

ARGENTINA

Administration of Former British Railways

A Decree has been signed by President Perón creating a committee which is to be responsible for the administration and operation of the former British-owned railways. Presided over by Sr. Miguel Miranda, President of the National Economic Council, it has as members the Ministers of Public Works & Finance, and the President of the Argentine Central Bank. The National Transport Board will come under the new committee in a consultative capacity.

The scope of the committee is practically unlimited, and it is empowered specially to take decisions regarding the acquisition and renewal of rolling stock and equipment. It may also request the collaboration of any Government or municipal bodies in the country, and may appoint officers, either permanent or temporary.

Furthermore, the committee is required to prepare and present for the eventual approval of the Executive Power its recommendations as to the final technical, financial, and administrative structure of the lines.

UNITED STATES

Reading Railroad "Wall Street" Express

A five-car train was placed in service by the Reading Railroad on March 1 to make a daily return journey between Philadelphia and Jersey City, in conjunction with the Central Railroad of New Jersey. The formation consists of three coaches, a dining car with cocktail lounge, and a club car. Advanced air-conditioning apparatus is installed, and the coaches are equipped with Sleepy Hollow reclining seats. All the equipment in the train was produced in the Reading company's own shops.

Twelve Months of the "Cincinnatian"

On January 19 the two 5-car "Cincinnatian" streamline trains of the Baltimore & Ohio completed their first year of operation between Baltimore and Cincinnati. In this period, the westbound train carried a total of 77,500 passengers, or a daily average of 212 passengers. In the eastbound direction, the total number of passengers carried was 72,478, or a daily average of 199. With on-time arrivals for 691 journeys out of a total of 730, the trains achieved a punctuality of 94·7 per cent. An illustration of one of the streamline locomotives built to work the "Cincinnatian" appeared in *The Railway Gazette* of January 10, 1947.

Publications Received

Manual of Electrical Undertakings ("Garcke's Manual"). Vol. 45. 1947-48. Compiled by Frederick C. Garrett. London: Electrical Press Limited, 23, Great Queen Street, W.C.2. 5½ in. × 8½ in. × 2¾ in. 1,195 pp. + lxxxvii. Price £3 3s. net.—Particular interest attaches to this edition of this famous work of reference, for it is the first since the early stages of the war; also, because of the new structure of the industry brought about by the Electricity Act of 1947, it will be the last in the long-familiar form. The present edition contains particulars of the new organisation so far as was known at the time of going to press, and brings up to date the customary data included in pre-war editions. A preliminary chapter, reviewing the progress of the year, recounts the events leading up to the Act of Parliament and its essential features; this is followed by an outline of the organisation of the British Electricity Authority and regional boards, and by summary statistical tables. As before, the main portions of the book consist of Section I—Electricity Supply Undertakings; Section II—Electrical Manufacturing and Allied Companies; and Section III—Directory of Directors and Officials associated with the electricity supply industry. In all these portions the present edition well maintains the reputation enjoyed by the Manual before the war for comprehensiveness and accuracy, reflecting therein the vast amount of revision work which must have been undertaken to bring all the details up to date. Judging from the inherent evidence and the repute of the producers we have no doubt that, in the new guise which will have to be adopted for the 46th volume, "Garcke's" will continue to serve the electricity supply industry as efficiently in the future as in the past.

Units of electricity sold to traction undertakings by all authorised public suppliers reached an annual peak in 1938-39 at 1,253,570,000 and declined to 1,137,303,000 in 1943-44. This decline reflects the decadence of tramways, but the figures do not appear to include the output of the private generating stations owned by the railway companies, particulars of which are not given.

Transport Saga.—This book tells the story of Pickfords Limited, which now has three centuries of history behind it. The author has adhered closely to history, making no reference to the future, although it is not difficult to guess why the present has been chosen as a suitable time to epitomise the achievements of the company and its associates. The story is a short history of transport itself. Since 1646, when Thomas Pickford started a village goods service to avoid a "return empty" run for his pack horses engaged in carrying stone from a quarry, the name of Pickford has been associated with wagons, stage coaches, canals, railways, steam wagons and all the forms of mechanical transport known to the twentieth century.

One chapter is devoted to carriage on the railways, which was at first conducted largely by carriers. Then the railways started their own goods services, and for sixty years Pickfords, under the energetic management of one Joseph Baxendale, fought with them for business, not surrendering its interest until 1901. Baxendale had many other competitors to contend with, principal among them being Carter Paterson; co-ordination between the two firms did not take place until 1912, and a rational sharing of traffic was not finally achieved before 1946, the companies having separated again in the interval.

Rivalry with the railways was diminished in 1933, when the four main-line companies, largely at the initiative of Lord Stamp and Sir James Milne, each took an equal interest in Hay's Wharf Cartage Co. Ltd., which had acquired Pickfords in 1920. The former company, through Carter Paterson & Company and Pickfords Limited, now controls 21 other subsidiaries..

The book concludes with an account of the many services now operated by the group, and of the arduous wartime contracts undertaken by its constituent members.

Signal und Draht (Signal and Wire). Dr. Arthur Tetzlaff Verlag, Günthersburg Allee, 91, Frankfort-on-Main, Germany. Monthly periodical, 12 pages per issue. 11¾ in. × 8¼ in. Illustrated. Subscription 5 RM. per quarter, postage extra. —Publication of this journal (formerly *Das Stellwerk*, or *The Signal Box*) ceased towards the end of hostilities, but was resumed on January 1, 1948. The editor, Herr Wilhelm Winzler, is known to several engineers in this country. This first issue of the new series includes an interesting article on the trends of signal and telecommunications engineering in Germany by Herr A. Dobmaier, another on finding and rectifying faults in large telegraph and telephone networks by Herr K. Reinhard, and a review by Dr. G. Chaussette of the paper on the signalling of single-line stations by Mr. R. S. Griffiths, read in 1945 before the Institution of Railway Signal Engineers.

Small Tools Catalogue.—Thos. W. Ward Limited, Albion Works, Sheffield, has issued a new illustrated catalogue of small tools covering all items from the company's extensive range which are in normal demand. This is the first post-war edition of the catalogue.

Traversing Platforms in Locomotive Repair Shops

A short account of four types of traversing platform

By A. G. Arend

TRAVERSING platforms in locomotive repair shops are noted for expeditiously performing the transfer of rolling stock from one track to another, though occupying little room compared with switches and turntables, and they are largely adopted in modern works to interconnect several parallel lines. The sunk type, although causing a break in the tracks, benefits by the fact that the top edges of the traverser rails and the tracks are on the same level, thereby forestalling any difference in level while vehicles are run on and off.

An arrangement which, however, is but rarely utilised to any extent is what is termed the surface traverser, where the trench is not allowed to interrupt the tracks. The vehicles have to be hauled up climbing ramps to reach the platform, and be braked afterwards when departing, as these rails are on a higher level than those of the tracks. Frequently, at the same time, the climbing ramps function as locking devices automatically lifting off the tracks as the traverser begins to act.

As distinct from this surface arrangement, a slightly sunk traverser avoids the climbing ramps by a partial inclination of the rails in the trench, on the platform itself, and at the entrance and departure sides. The following is a short account of four different types of traversing platforms, which though of similar construction in respect of essential features, differ in details.

In one sunk traverser which has to operate in the open, both the capstan gear and travelling gear are accommodated in a weather-proof driver's cabin, with windows to ensure a good view. To prevent any possibility of both capstan hauling and platform traversing accidentally taking place together, a clutch, controlled by a lever, cuts-in either one or other gear only at a time, while by means of a pedal brake, both motions can be slowed down and stopped.

Should the current supply fail, as a stand-by for emergencies a hand-crank gear, which includes an additional back-gear, and is arranged for disconnection when not in use, is added to the traverser. Even when strong lateral winds prevail, a locking device imparts reliable stability when at a standstill, a contrivance which engages with corresponding catch fittings on the traverser tracks, and can be operated from the cabin.

It was found possible to manage with a trench depth of not more than 12 in., because of the lowness of the cross-beams, besides the cross-bracing of the platform, and the compact construction of the driving gear. This traverser, which takes engines in and out of the repair works, is of 150 tons capacity, travels at 197 ft. per min., spans 62·5 ft., and has two longitudinal lattice-work beams of about 7·5 ft. in height.

These beams neutralise the bending stresses, so that when loaded with an engine, the platform is prevented from sagging, while the main beams are strengthened to withstand accelerating and traversing forces by an auxiliary frame girder. The bearing pressures of the main girders are transmitted by two cross-beams of four wheels in each case.

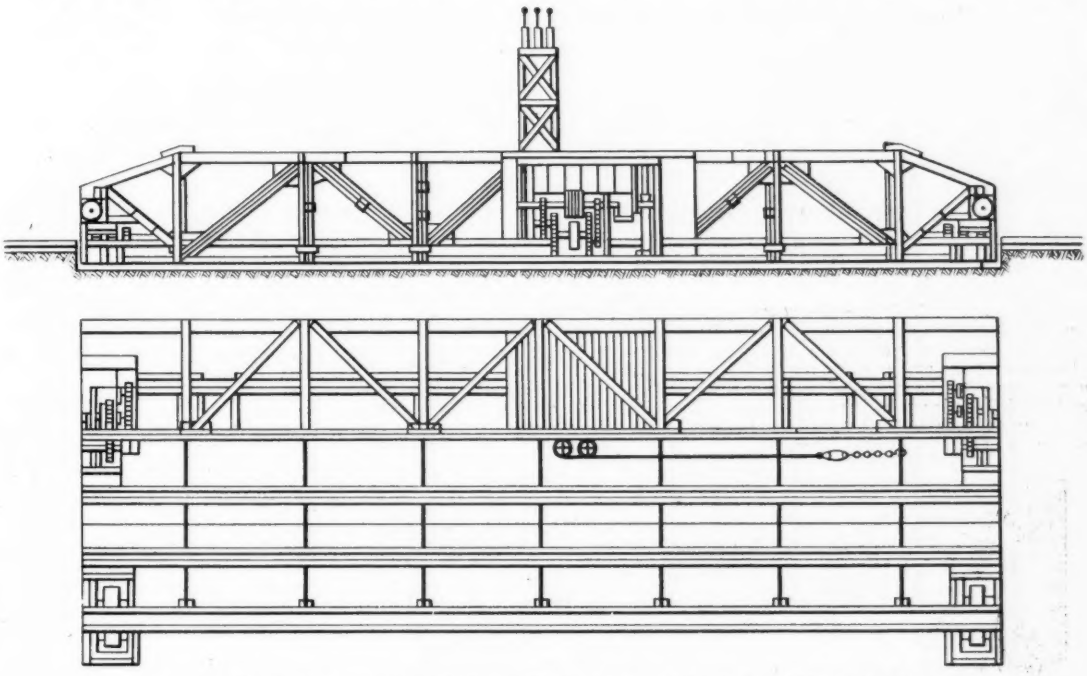
Each pair of wheels co-operates in a balancing gear, while the entire traversing platform is located in the centre of the traverser, between the combined main girder and auxiliary girder. The capstan has a hauling power of some 8,900 lb., has a storage drum, and takes its drive from the traversing gear, while all appliances required to operate the platform are in the one place.

For a second traverser, illustrated below, again with a load capacity of 150 tons, although otherwise of more or less the same construction, no protection is given to the motor or driving gear, because as the platform functions in a bay, the cabin can be dispensed with. The trench depth is 12 in., and the length of platform 69 ft., though it travels at the same speed of 197 ft. per min.

Alternative Designs, and Drives Used

As distinct from these two types, a third arrangement with a length of 53 ft., and load capacity of 120 tons, had a different layout for stiffening the platform. This consisted of substituting five equidistant cross-beams for the deep longitudinal girders; these cross-ties transfer the loads to the rails by two wheels for each. The wheels are arranged one behind the other, and the three middle pairs are equipped with tyres with flanges, or projecting webs, which receive their guidance as they enter the grooves of the rails.

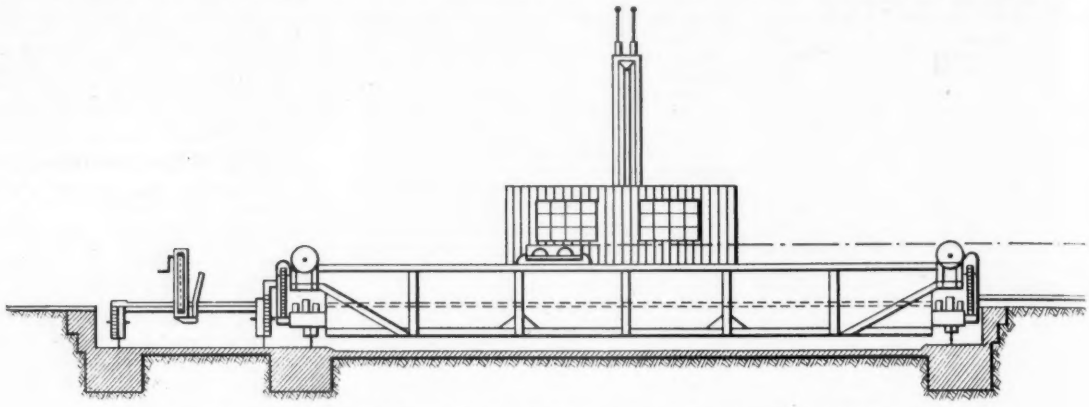
In a fourth arrangement, which is illustrated on the next page, two separate traversers are designed to be coupled in the case of lengthy carriages, but remain apart for short or medium ones. The traverser plant is thus made up of two complete and independent platforms, the first of which has a length of 41 ft. and a loading capacity of 110 tons, and the second of 11.5 ft. in length, and a loading of not more than 22 tons. The latter is only equipped with a hand-operated traversing and capstan gear, but the larger outfit has these two gears electrically driven. Feeder tracks are not interrupted by slightly sunk traversers, and instead, the trench causes them to dip down slightly at first, and then allows them to rise to their original level again. Through-tracks are divided where they intersect with the traverser track, and with a view



Arrangement of a sunk traversing platform, 69 ft. long and having a 150-ton load capacity

to preventing the trench from growing unduly deep, the rails on the platform also ascend a little, and finally descend again, thus forestalling this trouble.

The traversing and capstan driving gears used do not differ materially from existing models, and the common motor used has a pinion which drives a toothed wheel. This wheel is equipped with a brake disc, and is keyed to a tubular shaft; two claw couplings permit the tubular shaft to be coupled either with the driving shaft of the traversing gear, or with the shaft of the capstan, as desired. The rope is enabled to be drawn out without having to move the motor and gear at the same time, as the capstan head, being driven by a further claw coupling, is loose on its shaft. The three couplings operate by hand, and are simple to manipulate. A storage drum on which the loose end of rope that comes off the capstan winds up on hauling, derives its drive from the capstan shaft through the agency of a chain gear with friction clutch connected. So that the rope coils round neatly and uniformly, there are special devices which displace the storage drum sideways in winding, but otherwise there is no appreciable improvement in this section of the plant.



Traverser plant with two platforms designed for coupling when handling lengthy carriages

First Albanian-Built Railway

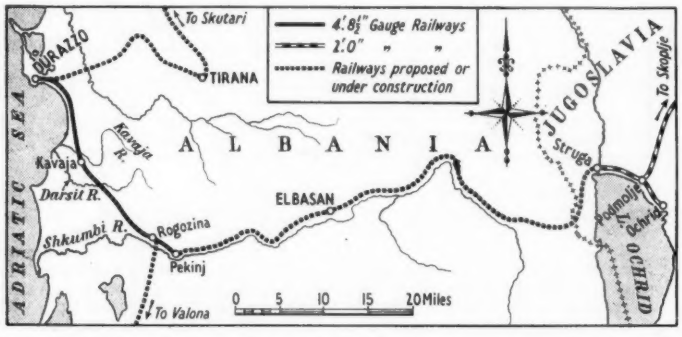
A single-track, standard-gauge line connecting the port of Durazzo with Pekinj was opened in November, 1947

THE first Albanian-built railway, covering the 26 miles between the port of Durazzo and Pekinj, was opened to traffic on November 7 of last year (as reported in our January 23 issue). An extension beyond Pekinj, designed eventually to be built as far as Elbasan, has been begun. Work on a Durazzo-Elbasan line was reported to have been started by the Italians during the war, some reports stating that the line was in operation. This new line is in fact, however, the first, apart from military railways, to be opened in Albania proper. Part of a Jugoslav line did run through "Greater Albania," as constituted by the Germans, but it reverted to Jugoslav ownership after the German collapse.

The only trace of any Italian work was an old track, extending a few miles inland from Durazzo, which was reconditioned when the construction began in March, 1947. The course of the line, which terminates at the north of Durazzo Harbour, skirts the Bay of Durazzo as far as Golemi, then turning inland to Kavaja and proceeding by way of Lekai to Rogozina in the Shkumbi valley. Rogozina, the last station before Pekinj, will later function as the junction station for a branch line to Valona.

The average gradient of the line is 1 in 143. The minimum radius employed is 24 ch. 56 ft., and the average radius 59 ch. 42 ft. The railway has been built as a main line in anticipation of the time when its eastern extension will connect with Jugoslavia. The maximum speed for fast trains is 50 m.p.h.

The line includes 14 bridges with an average span of 82 ft. Among them are a reinforced concrete bridge over the Sina Vlas canal between Durazzo and Golemi; a bridge over the Kavaja River with three 46-ft. spans; and another over the Darsit River with five 46-ft. spans. A viaduct with six 49-ft. spans has been built to the east of Rogozina. There is one tunnel, 1,266 ft. long, to the north of Rogozina. To complete the line within the schedule decided on, a large labour force was engaged, part of it consisting of voluntary unpaid labour. The number of workers rose from 1,500 in March, 1947, to 7,000 in May. The latter figure had been doubled by September, after the opening date had been advanced from November 30 to November 7.



The new Albanian line, nucleus of a proposed communications system

Rapid Rate of Progress

Excavations involved the movement of nearly 25 million cu. ft. of earth. Laying of the permanent way began in August, and by October was proceeding at three points at an average rate of 6,560 ft. a day. Only four station buildings were completed by the opening date, the remainder being temporary wooden structures.

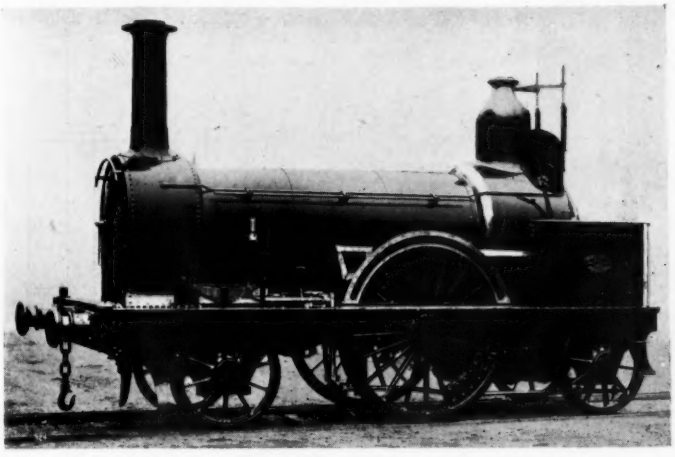
Future expansion plans envisage, in addition to the lines to Elbasan and Valona, an extension to the Jugoslav frontier and thence to Struga, terminus of a Jugoslav narrow-gauge railway (scheduled for conversion to standard gauge) connecting with Skoplje on the Belgrade-Salonika main line; and a new 44-mile line from Durazzo to Tirana and thence to Skutari on the northern frontier.

THE INSTITUTE OF WELDING SPRING MEETING.—The annual Spring meeting of the Institute of Welding will be held in Manchester, from April 27 to 30. The provisional programme includes a visit to Metropolitan-Vickers Electrical Co. Ltd., Old Trafford, on April 28, and to one of the following works on April 29: Daniel Adamson & Co. Ltd., Dukinfield; Cooke & Ferguson Limited, Openshaw; A. V. Roe & Co. Ltd., Newton Heath. A tour of the Manchester Ship Canal docks is proposed for April 30. The provisional programme also includes two technical papers, "Some Aspects of Welding in the Heavy Chemical Industry," by Mr. E. Fuchs and Mr. D. A. Godfrey on April 28, and "Welding in Production," by Mr. J. R. Ferguson, on April 29.

New Locomotives for G.N.R.(I.)

Continuity of style in passenger and goods locomotives recently built for the G.N.R.(I.) by Beyer, Peacock & Co. Ltd.

AT the present time, with nationalisation of the British Railways, it is natural that the question of standardisation and new forms of motive power should be receiving particular attention, and it is interesting to review the locomotive development of the Great Northern Railway of Ireland, which, possibly because of its situation, has maintained a constant style, both in design and appearance. This railway is a combination of various small privately-owned railways built from 1836 onwards, the first to be incorporated being the Dublin & Drogheda.



A 2-2-2 locomotive built by Beyer, Peacock & Co. Ltd., in 1858

Beyer, Peacock & Co. Ltd. has supplied locomotives to the railway continuously since 1857, when it received its first order from the Dublin & Drogheda Railway for two inside-cylinder 0-4-2 locomotives. The illustration above shows one of the single-driver class supplied by Beyer, Peacock in 1858, and its influence can be seen in the designs that have followed, even to this day. The lines associated with Charles Beyer and Richard Peacock have continued in collaboration with the long line of locomotive engineers that has directed the railway's policy.

Beyer, Peacock recently has received orders to build five each of Class "U," "UG," and "VS" for the G.N.R.(I.), and though it is not possible to include other examples, the 0-6-0 goods locomotive *Wicklow*, built in 1888, should show the continuance of style.

The first of the new series of orders to be built is the Class "U" 4-4-0, with 2 inside cylinders and 6-wheel tender. They follow, generally, the first "U" class designed by G. T. Glover, and built at Gorton in 1915, though considerable detail improvements have been made. Where possible, parts have been made interchangeable with the original series, as well as with the "UG" class. An increase in maximum axleload to 15 tons 14 cwt. has been allowed the new engines, as opposed to 14 tons 15 cwt., for the 1915 class. The cylinders have been redesigned, to allow the introduction of straight steam-ports, and the valve gear re-aligned with improved lifting links and reversing link trunnions. U.S. metallic packing is used for the piston-rod glands. Coupled axleboxes are of solid bronze with white-metal inserts and are made interchangeable, although bored to suit different diameters. The steel coupled hornblocks are secured to the frame by welding, as well as by bolts, and are fitted with renewable liners of class "D" steel. Helical bearing springs are used for the driving wheels, and the laminated trailing-wheel springs are arranged for cold assembly by means of a wedge plate and tapered key in the buckle. Considerable strengthening has been carried out by the inclusion of various steel castings, for example in the redesigned bogie, where the top and bottom centres are steel castings, as are also the axleboxes and keeps. Side control on the bogie is obtained by a single helical spring, and rubber auxiliary springs are used in conjunction with volute bearing springs. The connection between engine and tender is made with a solid drawbar, with centre rubbing blocks of cast steel, fitted with renewable liners of spring steel. It was necessary to raise the boiler some 2½ in., though the boiler itself remains practically unchanged, with the exception of stiffening plates and some welding on the dome and barrel joints. The ashpan now is equipped with hinged bottom doors, and the drop grate can be operated from ground level. In line with modern development, the cab has been raised and sliding side-windows fitted. A 21-in. dia. cylinder and a 30/20 Dreadnought combination ejector are included in the vacuum brake equipment. Other fittings include a Gresham & Craven No. 8 combination injector on the firebox back, and a 4-feed Detroit sight feed lubricator.

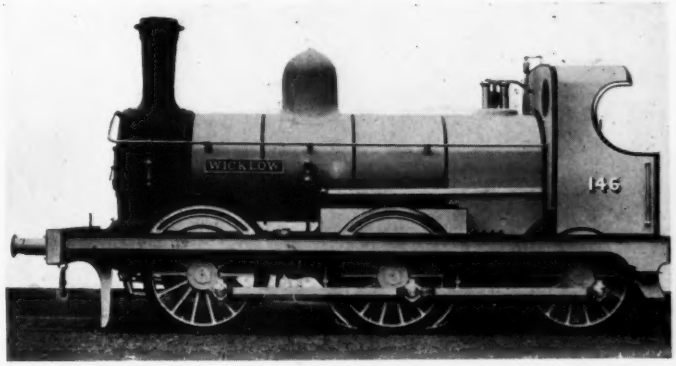
The tender has been completely redesigned and is equipped with Hoffmann grease-lubricated roller-bearing axleboxes. Additional steel castings have been incorporated and tanks made detachable. The brake-shaft carriers are bushed with Ferobestos. The engines will be numbered 201-205, and bear the names *Meath, Louth, Armagh, Antrim,* and *Down.*

The second order for locomotives recently delivered, was for Class "UG" of the 0-6-0 type, with 6-wheel tenders identical with those of the "U" class. These locomotives are the latest development of the G.N.R.(I.) goods type, following on the designs of the "SG" and "SG3" classes, and immediately preceded by the original "UG" series, which were built by Beyer, Peacock in 1936. The new locomotives have been considerably improved in detail in the same way as the Class "U," and as far as possible, details have been made interchangeable with that class. The boilers, for instance, are interchangeable, as are the pistons, piston valves, slide bars, and many other important items. The cab, as before, has been made larger and improved protection has been provided for the engine crew.

All three designs are in accordance with the requirements of Mr. H. McIntosh, Mechanical Engineer, G.N.R.(I.).

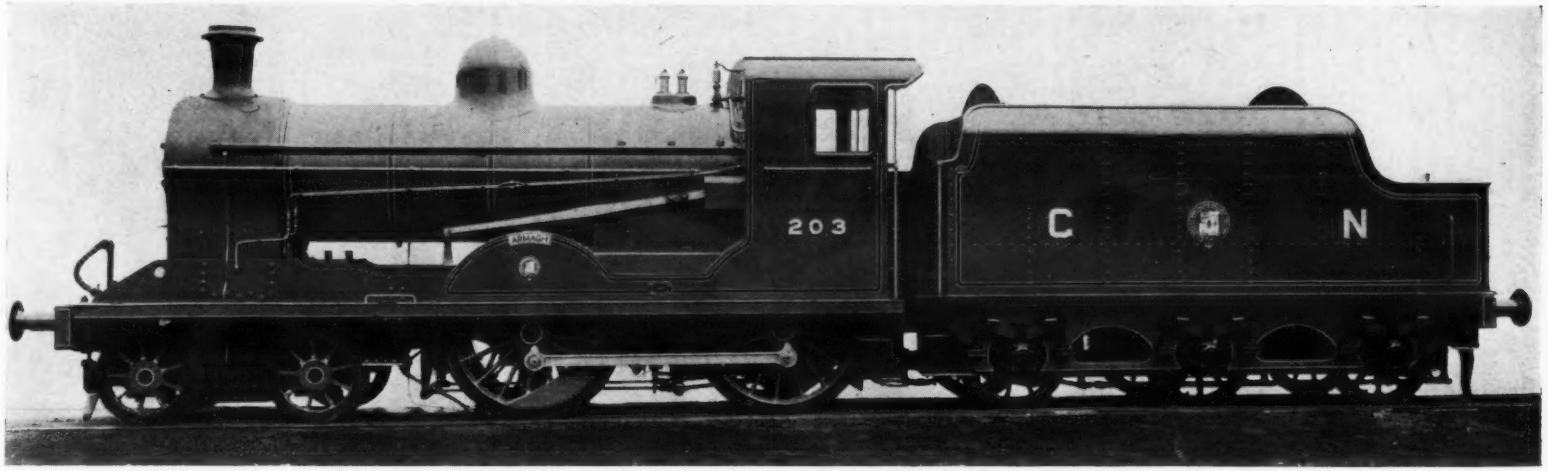
Chief dimensions of two are:—

	Class "U" 4-4-0	Class "UG" 0-6-0
Cylinders, dia. × stroke	18 in. × 24 in.	18 in. × 24 in.
Bogie wheels ...	3 ft. 1½ in. dia.	—
Coupled wheels ...	5 ft. 9 in. dia.	5 ft. 1 in. dia.
Boiler pressure ...	175 lb. per sq. in.	200 lb. per sq. in
Firebox	106 sq. ft.	106 sq. ft.
Tubes (16 flue 5½in. out dia.) (111 small 1¾ in. out. dia.)	757 sq. ft.	757 sq ft.
	863 sq. ft.	863 sq. ft.
Superheater (inside)	177 sq. ft.	177 sq. ft.
Total	1,040 sq. ft.	1,040 sq. ft.
Grate area	18·3 sq. ft.	18·3 sq. ft.
Maximum axleload ...	15 tons 14 cwt.	15 tons 14 cwt.
Weight of engine in working order ...	46 tons 0 cwt.	46 tons 17 cwt.
Weight of tender in working order ...	36 tons 5 cwt.	36 tons 5 cwt.
Total weight ...	82 tons 5 cwt.	83 tons 2 cwt.
Tractive effort at 75 per cent. boiler pressure	14,790 lb.	19,120 lb.
Water capacity ...	2,500 gal.	2,500 gal.
Coal capacity ...	6 tons	6 tons

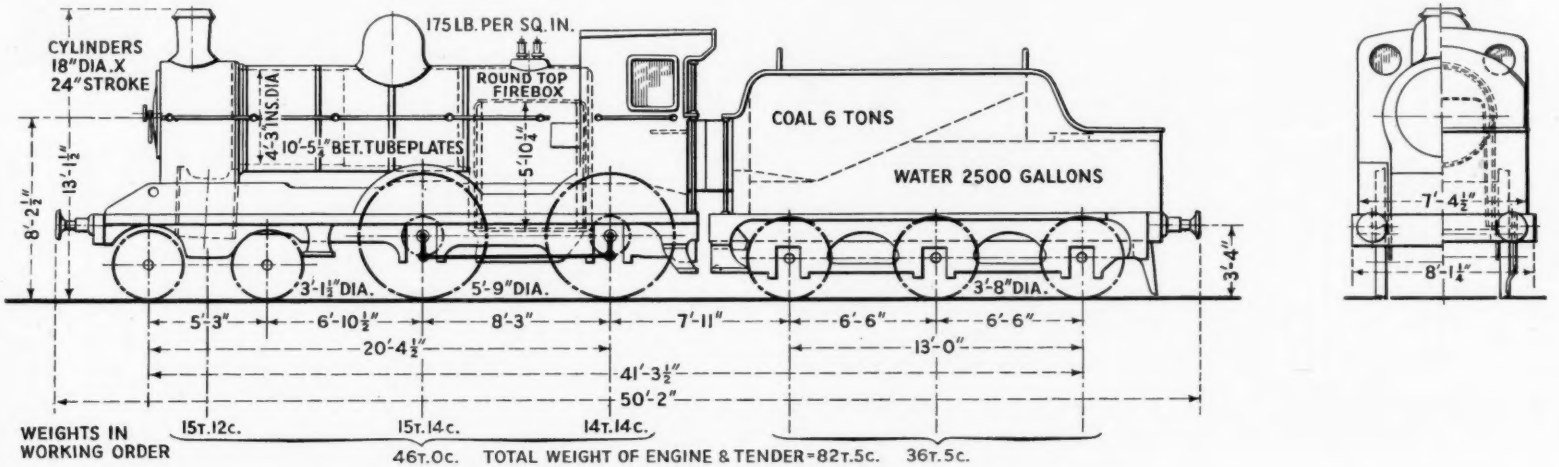


Goods locomotive "Wicklow" built for G.N.R.(I.) by Beyer, Peacock & Co. Ltd., in 1888

New Locomotives for G.N.R. (I.)



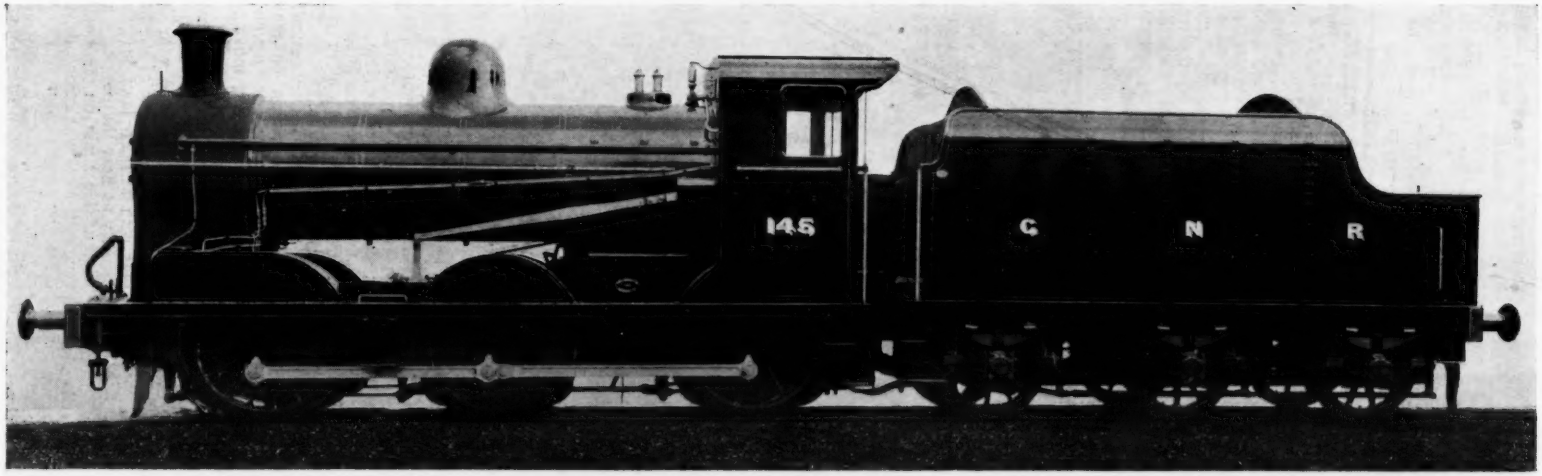
The G.N.R. (I.) 4-4-0 locomotive "Armagh" recently completed by Beyer, Peacock & Co. Ltd.



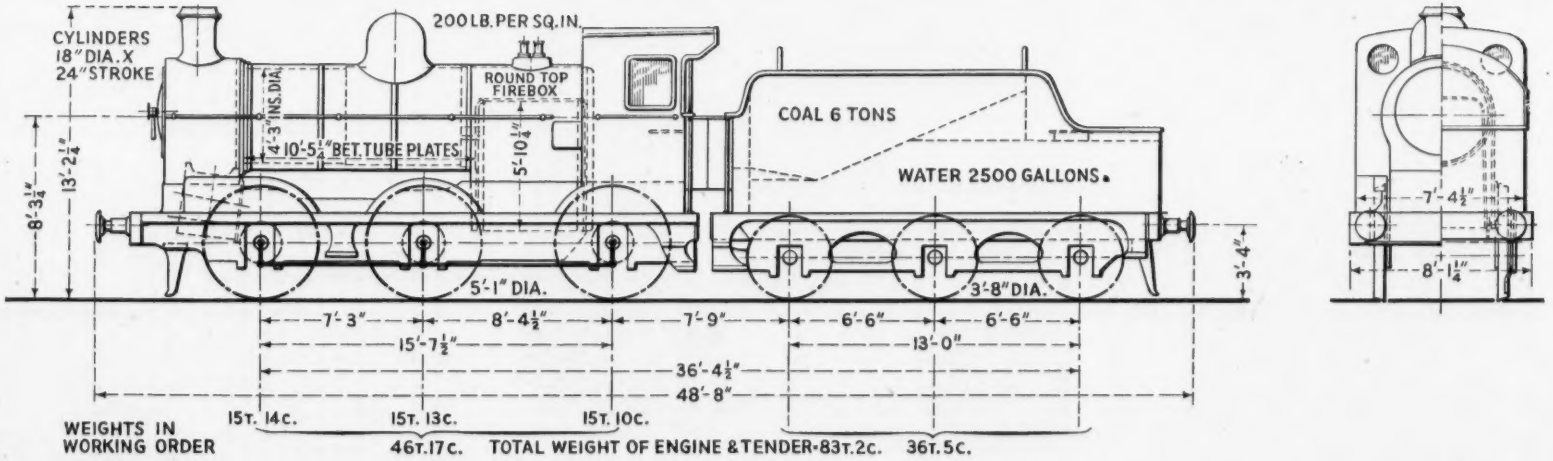
Dimensioned drawing of Class "U" 4-4-0 locomotive for the G.N.R. (I.)

Dimensioned drawing of Class "UG" 4-4-0 locomotive for the G.N.R. (I.)

New Locomotives for G.N.R. (I.)



One of five new 0-6-0 goods locomotives of "UG" class delivered to the G.N.R. (I.) by Beyer, Peacock & Co. Ltd.



Dimensioned drawing of G.N.R. (I.) Class "UG" goods locomotive

A Heavy-Duty Railway Wheel Lathe

Craven design with 7-ft. 6-in. faceplates for taking heavy cuts with modern high-speed tools on wheels up to a maximum diameter of 7 ft. 3 in.

SPECIAL problems are presented in the design of railway wheel lathes by reason of the heavy cutting that has to be performed on a relatively flexible workpiece. The lathe illustrated is an example of the machines with 7-ft. 6-in. faceplates manufactured by Craven Brothers (Manchester) Limited. This type of lathe has been supplied to railway workshops throughout the world, and the particular one illustrated is installed in Australia. Lathes of similar specification have been installed recently by the Southern Region of British Railways and by the French Railways, and are at present under construction for the South African Railways. The design is adapted either for a variable speed motor (as in the particular machine illustrated) with a four-speed gearbox; or for a two-speed motor and an eight-change gearbox, giving sixteen speeds in all. The machine can be fitted either with intermittent or continuous feeds as desired, but in either case it is suitable for the use of cemented carbide cutting tools.

The lathe illustrated is provided with two front rests and faceplates of 7-ft. 6-in. dia., with pneumatically-operated clamps to tools and loose headstock. Electrical loose headstock clamping can be fitted in place of pneumatic if required. It will turn simultaneously, without torsional strain of the axle, the treads and flanges of pairs of locomotive and tender wheels of 4-ft. 8½-in. gauge from 2-ft. 7-in. to 6-ft. 6-in. dia. on tread, with new or worn tyres, when mounted on straight or cranked axles and with inside or outside journals; and engine driving wheels with outside crankpins, after the Walschaerts levers have been removed. The design is adaptable also for wheel diameters from 3 ft. 3 in. to 7 ft. 3 in.

The main drive is direct by spur gearing from a 50-h.p. variable-speed motor mounted on the baseplate, through reduction gear, four changes of gearing, and a further reduction gear to the faceplate pinion shafts in the headstocks. The loose headstock has motor-operated quick power traverse motion along the bed, with quick-acting pneumatically-operated clamps. The tool rests are fitted with pneumatically-operated tool clamps, and provided with high-speed steel tools for turning the treads and flanges of tyres.

The work to be done in returning worn tyres consists of turning the treads and topping the flanges at one operation, rough forming the flanges, and finishing to the correct profile by combined flange- and tread-forming tools. When turning new tyres, in addition to the above operations, the back of the flange face of the tyre is machined, but no facing is done on the outer faces of the tyres.

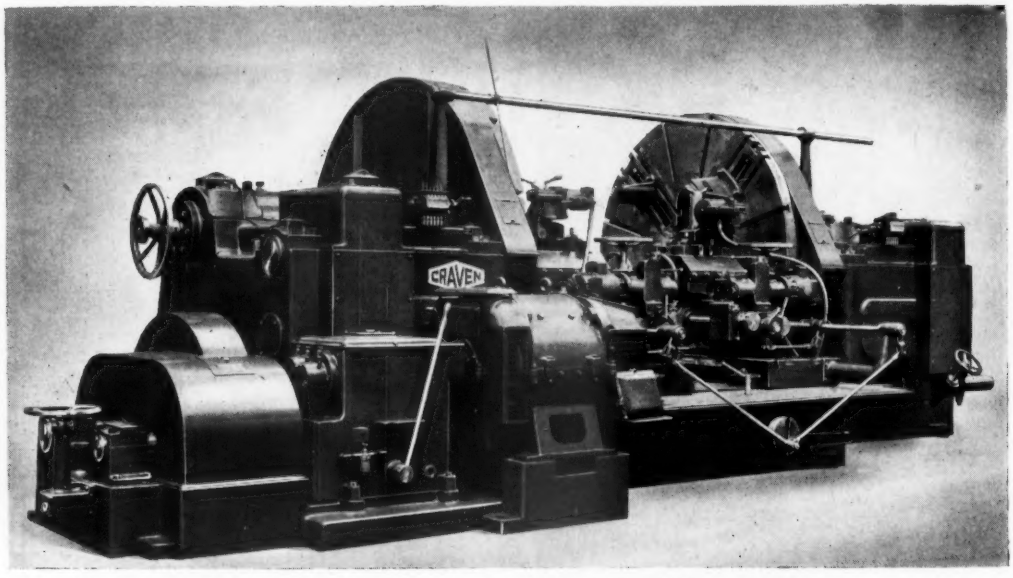
This lathe is of the Craven heavy type, capable of taking the heaviest cuts with high-speed steel or carbide tools, and incorporating the latest improvements. It is specially designed for the rapid machining of mounted tyres of 56/62 tons tensile, which are within the limits of the current British Engineer and Australian Standard specifications.

The bed is of special strong box section, with planed top, and T-bolt slots for the reception of the headstocks and rests, brought up as high as practicable in front, the supports or pedestals of the compound slide rests being correspondingly short and rigid to resist the heaviest cutting stresses without vibration. The bed surfaces are of densened structure. Suitable arrangements are made in the centre portion of the bed for the cuttings to fall into the foundation.

The headstocks are made with wide bases, the front portion being brought as far towards the front of the bed as is possible, thus forming a strong tie to resist the tendency to lift under heavy cuts. Main spindles are of special close-grained cast iron, carried in large front- and back-capped bearings with gunmetal steps and improved lubrication; provision is made to take the end thrust by adjustable heavy ball thrust washers.

Each spindle is bored out, and has sliding inside it a hollow steel barrel arranged at the front end to receive split cone collets to carry tender axles with outside journals by the journals, with interchangeable strong steel centres to carry locomotive wheels. The spindles are each adjustable in or out by a large handwheel with a locking device.

The main drive is by a 50-h.p. variable speed motor mounted on the baseplate and driving through four changes of gearing to the driving shaft in the bed; and through steel spur gearing in each headstock to the faceplate rings, providing four ranges of speeds of revolution of the faceplates. Bearings with gunmetal bushes carry the mainshaft in the bed, and the pinions are geared direct to separate auxiliary shafts in each headstock, which carry the steel pinions driving the faceplates, thus reducing the torsional strain on the main driving shaft, and providing a rigid drive to the faceplates. The gearing in each headstock is completely enclosed.



Craven 7-ft. 6-in. railway wheel lathe as supplied to Australia

The loose headstock is adjustable along the bed by hand, or by power from a separate reversing motor, developing 5 h.p. at the half-hour rating. The motor is mounted on the baseplate at the tail end of the bed and drives through a friction slipping clutch. When in position, the headstock is secured firmly and rapidly by powerful pneumatically-operated clamps. The pinion on the mainshaft driving the faceplate pinion shaft is supported by a bearing moving with it, to take the thrust from the shaft.

Faceplates are of special heavy section, deep and well-ribbed to resist distortion. Each faceplate is fitted with four spoke-type drivers, consisting of strong steel castings with serrated jaws to grip the tyres securely as near the periphery as possible, without side strain on the rim. They are arranged, also, with strong driving pins to drive by engagement with the wheel spokes. The drivers are capable of being adjusted to any desired position by quick-pitch screws and nuts, and secured in T-bolt slots. The faceplates are provided with cored-out pockets to take the outside

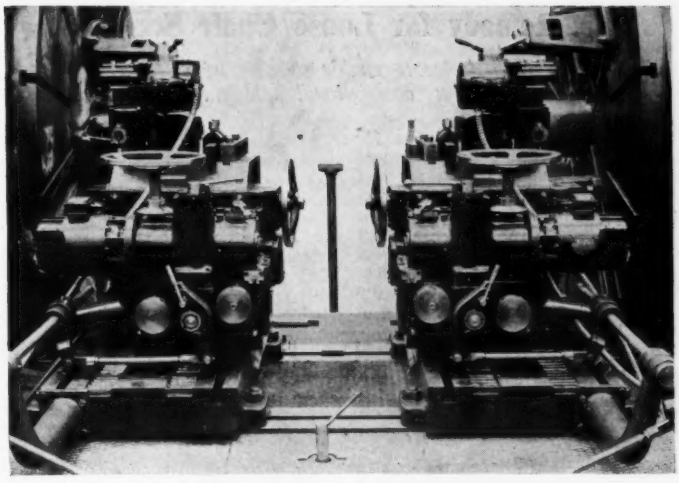
crankpins, with right- or left-hand crank leading, after the valve levers have been removed; and can be rotated independently in order that the pockets in the plates may be brought into line to suit the crankpins.

Two front compound slide rests are mounted on rigid saddles with transverse adjustment. Longitudinal feed in both directions is provided to the tool slides through enclosed ratchet feed gear and shaft at the front of the bed. An intermediate slide is provided for swivelling the rests to turn the taper required; thus the transverse adjustment is maintained at right angles to the axis of the lathe, while the longitudinal feed is set to the angle required. Provision is made also for parallel treads to be turned, and the necessary steady-pin holes provided. Direct-reading scales are fitted for direct measurement of wheel diameters. Hand adjustments are provided, with ball thrust washers on the screws.

Each rest is arranged for tyre turning, with cast-steel tool slides fitted with pneumatically-operated tool clamps to secure a tread-roughing tool rapidly in position. This tool is replaced by the flange rough-forming tool when required. The full combined tread and flange finish profile-forming tools are secured in fixed positions on the rest.

The variable self-acting feed motion is of the positive intermittent type to traverse the tool slides longitudinally together, or separately in either direction. The feed motion is driven from the mainshaft in the bed, with connections to the rests through connecting rods, levers, and enclosed ratchet feed gear.

The lathe is fitted with an adjustable hand-operated pin gauge for calipering, carried from a bar supported by brackets on the headstocks clear of the vertical centre, to allow the wheel sets to be lifted into and out of the lathe by crane without interference. Three sets of high-speed steel tyre-turning tools are provided, each set consisting of the following: two tread rough-turning tools; two flange-topping tools; two combined flange- and tread-finish profile forming tools, carried in a fixed position on the rests, to finish the outline of the flange and tread combined, one right and one left hand; and two combined flange rough-forming and chamfering tools, one right and one left hand. A pair of toolholders is provided for the flange rough-forming tools. Suitable steel gauges facilitate setting of the tools in their correct position on the rests.



Turning saddles and tool rests of railway wheel lathe

All the gearing is of steel of ample strength, machine-cut and neatly guarded and protected. The faceplate rings and larger spur gears are made from high-tensile steel castings, and the smaller wheels and pinions from high-tensile steel blanks. The levers for controlling the gearing are at the front of the lathe, and readily accessible.

Gunmetal bushes are fitted to the main driving shaft bearings but not the feed shaft bearings. The pneumatic tool and loose headstock clamps are arranged for operation from a compressed air supply of 80 to 100 lb. per sq. in., and provided complete with operating valves and piping on the lathe.

Special attention has been paid to the lubrication of all working parts. Oiling nipples are fitted for use with an oil gun, which is provided with the machine. The gears in the gearbox rotate in an oil bath.

In addition to the particulars already stated, it may be mentioned that the lathe will admit wheel sets, including crankpins, of overall length up to 9 ft. 6 in., and axles up to 8 ft. 6 in. in length. The range of faceplate speeds is from approximately 0·42 to 10 r.p.m., and the longitudinal feeds for tyres are between 0·062 in. and 0·375 in. approximately per revolution of the spindle. Exclusive of electrical equipment, the lathe has an approximate net weight of 60 tons.

RAILWAY SECURITY VALUES FIXED.—After considering the evidence submitted at the hearing on March 31 of applications made by the British Transport Commission, pursuant to Section 17(3) of the Transport Act, 1947, the Transport Arbitration Tribunal has issued Orders, dated April 2, 1948, determining the value of the following securities specified in Part II of the Fourth Schedule to the Act:—

Name of body by which security was issued	Security	Value
Ross & Monmouth Railway Company (Great Western Railway Company)	3½ per cent. redeemable debentures of £100 each	£102 per £100 nominal value
Tenbury Railway Company	4½ per cent. shares of £10 each...	£123 per £100 nominal value
Shrewsbury & Hereford Railway Company	4½ per cent. rent charge stock ...	£120 per £100 nominal value
West Cornwall Railway Committee ...	West Cornwall guaranteed 5 per cent. stock	£130 per £100 nominal value
Hammersmith & City Railway Company	5 per cent. irredeemable £10 preference shares (1864) ;	£130 per £100 nominal value
	5 per cent. irredeemable £10 preference shares, 1865 (fully paid);	£130 per £100 nominal value
	5 per cent. irredeemable £10 preference shares, 1865 (£2 paid); and	£130 per £100 of capital paid up
	Consolidated ordinary stock ...	£140 per £100 nominal value

SAN PAULO RAILWAY PURCHASE DEBATE.—It was stated in Rio de Janeiro on April 7 that the motion to authorise payment for the recognised capital of the San Paulo Railway Co. Ltd. had been debated twice in the Chamber of Deputies, and would come up shortly for a third and final debate. If then passed, as was regarded as certain, it would go to the Senate for final approval. The recognised capital of the company for the purpose of the sale agreement was £6,639,000, together with interest at 7 per cent. since November, 1946, making a total of about £7,400,000.

CHANNEL CRUISES BY SS. "FALAISE."—Mid-week and week-end cruises from Southampton to Normandy, Brittany, and the Channel Islands have been arranged by British Railways (Southern Region) in the cross-Channel steamer ss. *Falaise*. The programme begins on May 14 with a Whitsun long week-end cruise to Havre, Rouen, and along the coast to the Cherbourg peninsula. Subsequently, there will be two week-end and two mid-week cruises to Rouen and Havre; two week-end cruises to Dinard and Jersey; one week-end cruise to Havre and Cherbourg; and one to Cherbourg and Guernsey. There will be also a mid-week cruise to Cherbourg and Jersey, making ten in all. The minimum charge per cruise will be £9 9s. from Southampton (£10 10s. from London), with supplements according to the class and position of cabin. The Whitsun long week-end cruise will cost £12 12s. from Southampton (£13 13s. from London). The *Falaise* was designed for day and night services to the Continent. The number of passengers will be limited on each cruise to 175, for whom ample accommodation will be available.

WESTERN REGION (LONDON) DRAMATIC SOCIETY.—Railway clerks and typists, members of the British Railways, Western Region (London) Dramatic Society, are taking part in the society's production of "The Late Christopher Bean" this week. The play is being presented at the Park Theatre, Hanwell, at 7.15 p.m. each evening, from April 14 to 17.

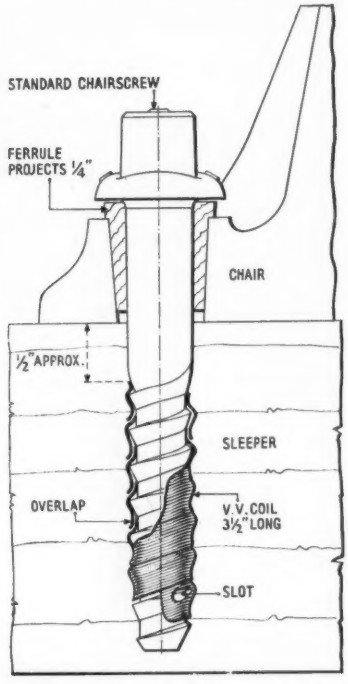
NEWPORT WAGON WORKS CHANGES HANDS.—The works of D. G. Hall & Co. Ltd., Newport, Mon., has been purchased as a going concern by Thos. Ward Limited, Albion Ironworks, Sheffield. The works, which are situated on the River Usk and occupy a site of about four acres, have been engaged for some years on the building and repair of railway wagons. It is intended to develop the scope of the various workshops to the full and wagon repairing will be given first priority.

A Remedy for Loose Chair Screws

New coiled-strip device to enable sleepers with enlarged holes to be used without conventional plugging and reboring

TWO of the best-known remedies for loose chair screws are "drawing and reboring," and "plugging with wood and reboring." Neither is completely satisfactory, and there are two modern alternatives, which differ from each other fundamentally. A plastic filling reduces the hole to fit the screw, and is particularly suitable for elongated holes; and the coiled strip expands part of the screw to fit the hole in the timber.

The "VV" coil works on this second principle. It has distinct advantages in that it completely covers the screw, and is delivered ready for fitting. Also, it is easily



Cross-section of sleeper, showing chair screw and coil in position

mechanised, and can be inserted quickly. These coils are obtainable from the Kenitra Commercial Co. Ltd., 48-50, St. Mary Axe, London, E.C.3, and are close-coil steel strips, pre-formed for ready insertion on a mandrel into a chair screw hole. Two men, with a mandrel and a standard box or tee spanner, can deal completely with three screws in five minutes. For average work by a five-man gang, between trains, six minutes per chair should be ample, allowing for one lookout man.

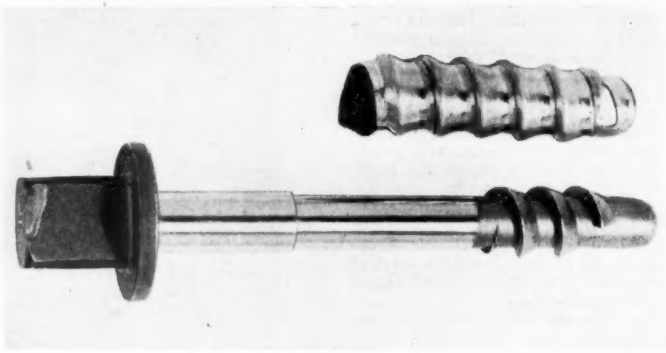
The coil is approximately $\frac{15}{16}$ in. dia. x $3\frac{1}{2}$ in. long x $\frac{1}{32}$ in. thick, and weighs about $\frac{1}{10}$ lb. It may be of stainless steel, or mild steel processed in almost any way desired to preserve both screw and timber, and the thickness of the metal may be varied. It is formed mechanically from straight strip, normally with a $\frac{3}{16}$-in. lap in the waist, but this lap may be varied as desired. There is a small slot at one end, which engages with the sharp end of the mandrel thread, for screwing the coil into the timber.

The steel mandrel is $\frac{1}{8}$ in. dia., and has a short length of screw thread terminating abruptly. The head is similar to that of an R.B.S. chair screw. Its effective length of $6\frac{1}{2}$ in. is such that the coil is placed about $\frac{1}{2}$ in. below the top of the sleeper, if it is screwed down until the mandrel head touches the ferrule, which is assumed to project $\frac{1}{4}$ in. from the chair boss. When the mandrel is unscrewed, it disengages at once, leaving the coil embodied in the sleeper. The replacement of the chair screw expands the coil slightly. The operation can be repeated, to place a second coil inside the first one.

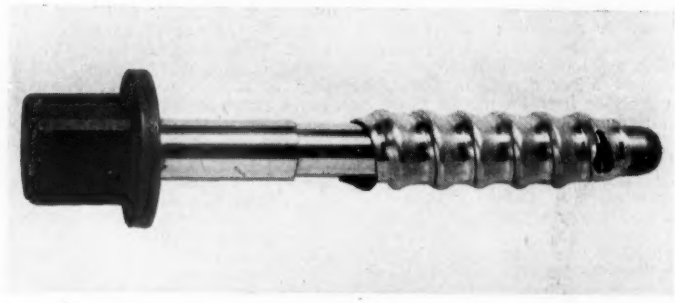
It is an advantage to insert the coils early in the life of the sleeper, say, at the first re-ferruling. Even if the screws have not become appreciably loose, an increase in their diameter of $\frac{1}{16}$ in. (two thicknesses of $\frac{1}{32}$ in.) probably will be possible, and increases the resistance to further wear. Where gauge widening has occurred, a decrease of about $\frac{1}{8}$ in. results from the use of coils on both sides of the track.

Portable Mechanical Equipment

The coils are delivered to the site ready for use, and it is the work of a moment to fit them on a mandrel. The remainder of the operation consists only of inserting or withdrawing chair screws, which can be done by machine. With portable petrol-driven equipment, handled by two men, it has been found that, exclusive of re-ferruling, the three screws of a chair can be fitted with coils by three men in $2\frac{1}{2}$ minutes. The third man has two mandrels, and a supply of coils. Five minutes per chair is a reasonable practical figure. This mechanised method not only achieves a saving in time and manpower, but the temptation to drive the screws partly by hammer is removed.



The "VV" coil and mandrel, showing the slot on the coil and the screw thread on the mandrel



The coil fitted on the mandrel, ready for insertion into the sleeper

Coils of this type have been supplied to the London Midland and the Southern Regions of British Railways. A second consignment is being prepared for the London Midland Region, and an order has been received from Belgium.

SOUTHERN REGION POLICE FOOTBALL TEAM.—On April 7, British Railways (Southern Region) Police football team beat Cheam Wednesday, 4-0, in the final of the South London mid-week Challenge Cup and Granada Trophy; Cheam Wednesday previously held the cup and trophy for three years. The presentation to the new holders, which will take place at Tooting Co-operative Hall on May 5, will be by Captain R. Adams, M.P.

THE INSTITUTE OF WELDING, NORTH LONDON BRANCH.—The annual general meeting and a film night of the Institute of Welding, North London Branch, will be held today, April 16, at 7.30 p.m. Light refreshments will be available from 7 to 7.30 p.m., and the meeting will be at the Royal Society of Tropical Medicine & Hygiene, Manson House, 26, Portland Place, W.1. Arrangements also have been made for a party of not more than 100 members to visit the Ford Motor Co. Ltd. premises at Dagenham, Essex, on May 6. It is proposed to travel by boat from Westminster Pier at 11 a.m., and return there at 5.30 p.m.; lunch and tea will be provided on the boat.

RAILWAY NEWS SECTION

PERSONAL

Sir Montague Eddy, who represented the British-owned railways in Argentina in the negotiations for their transfer to the State, has returned to England. Sir Edward Mather-Jackson, who was on the resident board of the British-owned railways, also returned recently.

Mr. F. H. Sedgwick has been appointed a Director of the Northern General Transport Co. Ltd.

Mr. C. E. Grier, who, as recorded in our January 23 issue, has been appointed Assistant General Manager, Buenos Ayres & Pacific Railway, commenced his railway career in January, 1908. He has carried out duties connected with the organisation of widely differing branches of railway working, among which can be mentioned that of access roads to stations, particularly in zones where road transport was competitive. He also undertook the complete revaluation and numbering of the railway's buildings and contents throughout the line. In 1923 he was entrusted with the study of certain zones in which it was considered to be most advantageous to provide new branches, and shortly afterwards it was decided to construct the Laboulaye-Sampacho branch. On being transferred to the Way & Works Department, he reorganised the administrative part of the company's activities, introducing centralised control for the rapid handling of correspondence and filing, as well as for the control and execution of works. In 1936, he was appointed Representative Agent in the Cuyo Division, comprising the Provinces of Mendoza, San Juan, and San Luis. During the tenure of this post, he was responsible for the reorganisation and mechanisation of an important freezing plant for the storage of fresh fruit, and he introduced an improved accountancy system, by which it was made possible to reduce the staff. Furthermore, a device for loading and unloading lorries and wagons by means of mechanical transporters was put into force, as well as a change in the method of producing ice that resulted in increased production and reduced costs.

Mr. C. E. Grier

Appointed Assistant General Manager, Buenos Ayres & Pacific Railway

Mr. J. S. Pettigrew, B.A., B.A.I., Assistant Chief Engineer, Sudan Railways, who, as recorded in our April 9 issue, has been appointed Chief Engineer, was born at Wexford, Ireland, in 1902, and was educated at St. Columba's College and Dublin University, where he took his arts and engineering degrees, obtaining the Alexander Prize for first place in the final engineering examination in 1923. After gaining experience with Sir Robert McAlpine & Sons on the construction of Wembley Exhibition, the Totton, Hythe & Fawley Railway, Takoradi Harbour (Gold Coast), and Tilbury landing stages and dry dock, he joined the Sudan Railways in 1926. He was engaged for some years on harbour construction works at Port Sudan, after which he served in various districts of the railway and on the construction of the Jebel Aulia railway. In 1938 Mr. Pettigrew went to headquarters as Assistant New Works Engineer; and he returned to Port Sudan in 1940. In 1941 he was engaged on the construction of the railway to Tesenei and Arisateb in Eritrea, and then returned for some months to Port Sudan before being promoted Assistant Chief Engineer in October, 1941.

Mr. J. S. Pettigrew

Appointed Chief Engineer, Sudan Railways

Mr. Dudley George Bourn, O.B.E., M.Inst.T., Traffic Manager, Iraqi State Railways, who, as recorded in our April 9 issue, retired on March 31, and is returning to England, received general training in England with the Great Central Railway. He was a cadet of the University of London (Kings College) Officers Training Corps, and during the 1914-18 war was gazetted to the East Yorkshire Regiment; he served in France, and was present at the battle of the Somme. He subsequently transferred to the Royal Flying Corps and saw service in Palestine (he was at the capture of Jerusalem); Egypt; and with the Mesopotamian Expeditionary Force as a member of the staff of the R.A.F. formation in Baghdad. He was demobilised with the rank of Captain, having been mentioned in dispatches for distinguished services. Mr. Bourn joined the Iraqi State (then Mesopotamian) Railways in May, 1920, as Assistant Traffic Superintendent, and was promoted District Traffic Superintendent in 1921. On a re-organisation, he was appointed Commercial Superintendent in 1927. He became Deputy Traffic Manager in 1934, and Traffic Manager in 1938. He was responsible for the arrangement of the through services by rail from Baghdad to Paris, London, and other parts of Europe; and since 1928 had represented the Iraqi State Railways at the meetings of the Simplon Orient Express Conference. During the recent war Mr. Bourn was responsible for a considerable movement of military traffic, and represented Iraq at the meetings of the Middle East Railway Conference. He was made an O.B.E. in 1942.

Mr. D. G. Bourn

Traffic Manager, Iraqi State Railways, 1938-48

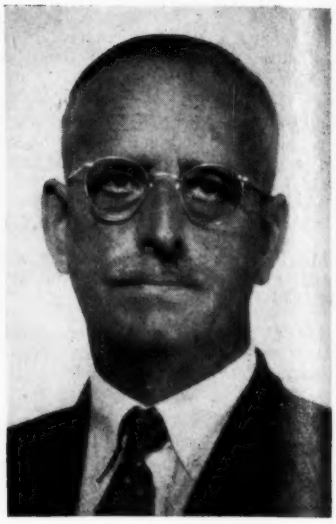
Mr. G. W. Quick Smith, LL.B., F.C.I.S., M.Inst.T., who, as recorded in our March 12 issue, has been appointed Secretary & Legal Adviser to the Road Transport Executive of the British Transport Commission, has been released by the National Road Transport Federation, of which he has hitherto been Secretary, to take up his new post as from April 1. Mr. Quick Smith is a Barrister-at-Law of the Inner Temple. He entered the road transport industry in 1938 when he was appointed Assistant Secretary of the London & Home Counties Haulage Contractors' Association and of the National Road Transport Employers' Federation; in 1941 he was appointed Secretary. He was Assistant Secretary of the Employers' Panel of the National Joint Conciliation Board, and of the Road Haulage Central Wages Board, which superseded it; and he was appointed Secretary in 1941; he is Secretary of the Employers' Side of the National Joint Industrial Council for the Road Haulage Industry. He was Secretary of the National Conference of Express Carriers from its formal inauguration in 1938; and of the Standing Joint Committee of Road Hauliers National Organisations from its inception in 1939 until the amal-

Mr. G. W. Quick Smith

Appointed Secretary & Legal Adviser, Road Transport Executive

Mr. I. R. Frazer

Appointed Assistant Civil Engineer, Scottish Region, British Railways

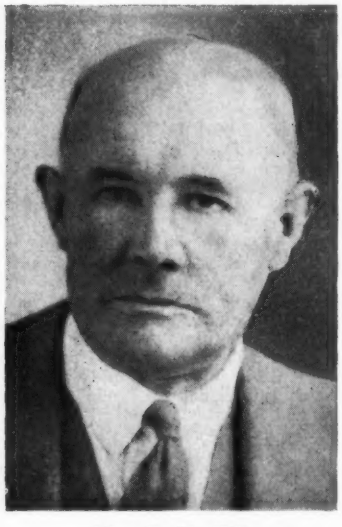


Mr. W. E. Blakey

Appointed Assistant Commercial Superintendent, Eastern Region, British Railways

gamation of road transport organisations in 1945; he has been Secretary of the Wholesale Meat Transport Association (familiar as the Meat Transport Pool) since its formation in 1939, and is now a Director of Meat Transport Organisation Limited. He was Secretary to the industry's representatives on the Road Haulage Consultative Committee set up by the Minister of Transport in 1940 to deal with matters of common interest to the Ministry and the industry; Joint Secretary of the Road Transport Catering & Accommodation Joint Committee set up in 1942 to improve facilities for rest and refreshment for road-transport workers; and Secretary of the London Cartage & Haulage Contractors Provident Institution. Mr. Quick Smith was appointed Secretary of the Road Transport Organisation Joint Conference, set up at the end of 1942 to create a united organisation for the road transport industry, as a result of the work of which conference the Road Haulage Association, Traders' Road Transport Association, and Passenger Vehicle Operators' Association were formed; the three last-named associations in turn combine to form the National Road Transport Federation, of which Mr. Quick Smith became, at the beginning of 1945, the first Secretary. Mr. Quick Smith has attended various sessions of the International Labour Conference at Geneva; he was Vice-Chairman of the Inland Transport Committee of the I.L.O. in 1945 and 1947, and was Chairman of the Employers' Group representing 26 countries throughout the world. He is *rapporteur* of the Highway Transport Committee of the International Chamber of Commerce, and has taken a prominent part in the recent conferences in Paris and Brussels as a result of which an international confederation of national road transport federations is now in process of formation at Geneva. Mr. Quick Smith is a liveryman of the Worshipful Company of Carmen.

Mr. Ian R. Frazer, B.Sc., M.I.C.E., who, as recorded in our January 9 issue, has been appointed Assistant Civil Engineer, Scottish Region, was previously Engineer (Scotland), L.M.S.R. He took a civil engineering degree at Edinburgh University, and entered the service of the Caledonian Railway in January, 1914, under the late Mr. Dugald McLellan, at that time District Engineer, Southern & Eastern District. Mr. Frazer served with the Royal Engineers overseas from 1915 to 1920, with the 52nd Division, and latterly on the Palestine Military Railway. He was demobilised with the rank of Captain, and returned to railway service. In 1923 he went to the Divisional Engineer's Office, Glasgow, L.M.S.R., in the New Works Department, and in 1926 to the South Western District, as Senior Assistant Engineer. After a year's work on job analysis, he was appointed Assistant to District Engineer, Derby (South), in 1934, and in 1939 became Acting District Engin-



Mr. C. V. Hill

Divisional Engineer, Brighton, Southern Railway and British Railways, 1923-48

Mr. John Parker

Appointed Divisional Engineer, Southern Division, Brighton, Southern Region, British Railways

Mr. J. Turner

Appointed Docks Superintendent, Garston Docks, London Midland Region, British Railways

eer. In 1940 he was appointed District Engineer, Inverness, and in 1941 to the corresponding post at Perth. In 1945 Mr. Frazer became Divisional Engineer, Glasgow, and in 1947, Engineer (Scotland).

Mr. W. E. Blakey, London City Manager, Eastern Region, British Railways, who, as recorded in our March 19 issue, has been appointed Assistant Commercial Superintendent, Eastern Region, began his career on the North Eastern Railway, as a junior clerk in 1904. He was selected as a traffic apprentice in July, 1914, and after a period of active service during the war, returned to the railway at Newcastle Forth Goods Station in 1919. The next year saw him as Head of the Staff Department in the General Superintendent's Office at York, from which he was in 1923 appointed Assistant District Superintendent at Newcastle, L.N.E.R. Becoming Assistant to the Superintendent, York, in 1927, and District Superintendent at Darlington in 1929, he proceeded in 1932 to the post of District Goods Manager, Middlesbrough, remaining there until promoted to be Assistant Goods Manager, North Eastern Area, in 1936. Mr. Blakey was appointed District Goods Manager, Leeds, in the next year, from the duties of which post he was released at the outbreak of the recent war to take up military duties. On demobilisation from the post of Director of Transportation, S.H.A.E.F., with the rank of Brigadier, he was appointed London City Manager.

Mr. C. V. Hill, who, as recorded in our February 20 issue, has retired from the position of Divisional Engineer, Southern Division, Southern Region, British Railways, was a pupil of the late Sir Percy Tempest, General Manager & Chief Engineer of the South Eastern & Chatham Railway. After several years with an engineering and contractors firm in Westminster on various public contracts, and 18 months on construction work on London tube railways, he joined the South Eastern & Chatham Railway in 1906 as an Assistant in the District Engineer's Office at New Cross. In 1910 he was appointed Assistant to District Engineer at Swanley Junction, which covered the London area of the old Chatham section. In 1914 Mr. Hill was appointed Acting District Engineer, Tonbridge. From 1917-19 he served in France with R.E. railway construction troops. In 1920 he was appointed District Engineer, Swanley Junction, and on the amalgamation in 1923 became Divisional Engineer, Southern Division, Southern Railway, at Brighton.

Mr. John Parker, B.Sc., A.M.I.C.E., who, as recorded in our February 20 issue, has been appointed Divisional Engineer, Southern Division, Southern Region, British Railways, received technical education at Armstrong College (now King's College), Durham University, and in 1924-25 was engaged in trunk road survey work under the Ministry of Transport. In 1926-27 he was on the staff of the Bridge Stress Committee of the Department of Scientific & Industrial Research, and from 1928-35 was Assistant Engineer, Central Argentine Railway. In 1935 Mr. Parker joined the Southern Railway, and, after serving in the Bridge Office and the office of the Maintenance Engineer, was appointed Chief Technical Assistant, Southern Divisional Engineer's Office, Brighton, in 1939. He became Assistant Divisional Engineer, London West Division, Woking, in 1945, and Assistant Divisional Engineer, Southern Division, Brighton, in January, 1947.

Mr. J. Turner, Goods Agent, Sheffield (Wicker), London Midland Region, British Railways, who, as recorded in our March 19 issue, has been appointed Docks Superintendent, Garston Docks, entered the service of the Lancashire & Yorkshire Railway at Chorley, Lancs., in 1912. He later was transferred to the General Manager's Office, Manchester, where he was employed in the Statistical, Personal and Staff Sections. In 1916 he joined the Seaforth Highlanders, and after being commissioned, was demobilised in 1918. He returned to the L. & Y. Headquarters in Manchester and for a time specialised in staff and other matters affecting railway docks. After the 1923 amalgamation, he served in a similar capacity at L.M.S.R. Headquarters, Euston. In 1934, when Mr. Turner was appointed Chief Staff Clerk, Garston Docks, he was engaged in the early stages of the investigation into the de-casualisation of dock labour. In 1939, he became Chief Staff Clerk to the District Goods & Passenger Manager, Sheffield. and in May, 1947, Goods Agent, Sheffield (Wicker).

Mr. E. C. Poultney has been elected a Director of Locomotive Valve Gears Limited.

The Minister of Education has announced the appointment of Lt.-General Sir Ronald Weeks as the first Chairman of the National Advisory Council on Education for Industry & Commerce. Sir Ronald Weeks is Deputy-Chairman of Vickers Limited, Chairman of the English Steel Corporation Limited, and a Director of Associated Electrical Industries Limited and other companies.

Mr. John F. Alcock, Joint Managing Director of the Hunslet Engine Co. Ltd., has been appointed a member of the Mines Equipment Advisory Committee.

We regret to record the death on March 21, at the age of 71, of Mr. Sydney Smith, who until his retirement in 1944 had been with H. W. Ward & Co. Ltd. for 50 years, and was Commercial Manager from 1914 to 1944.

Canadian Pacific Railway

Mr. N. R. Crump, Vice-President, Eastern Region, with headquarters in Toronto, has been appointed Vice-President in Montreal with jurisdiction over all lines.

Mr. William Manson, Vice-President in Montreal, has been appointed Vice-President in charge of the Prairie Region, at Winnipeg, a post vacated by Mr. Mather on the latter's recent election as President.

Mr. D. S. Thomson, General Manager, Eastern Region, succeeds Mr. Crump as Vice-President of that region at Toronto.

We regret to record the death on April 10 of Mr. Percival Marshall, the Editor of *The Model Engineer*, and founder of the publishing house of Percival Marshall & Co. Ltd. After early training in engineering, in which he achieved considerable success, he entered journalism, principally because of a long family association with publishing, and served first on the editorial staff of a hardware paper. He then became Editor of a photographic journal, but, desiring to combine his engineering and journalistic interests, launched *The Model Engineer* in January, 1898, to cater for the model-maker and the amateur engineering enthusiast. In the same year he founded the Society of Model & Experimental Engineers which has resulted in the formation of well over a hundred local clubs and societies both in this country and throughout the English-speaking world. As a publisher, he took a keen interest in the activities of the Periodical Trade Press & Weekly Newspaper Proprietors' Association, and served as Executive Chairman for about 15 years, until his resignation in 1943, when he became a Vice-President.

Mr. J. G. Baty has been elected General Secretary of the Associated Society of Locomotive Engineers & Firemen.

Sir Ronald Matthews, lately Chairman of the London & North Eastern Railway Company, has resigned the office of Czechoslovak Vice-Consul at Sheffield.

We regret to record the death on April 9, at the age of 71, of Mr. A. J. Marsh, who retired in 1944 from the positions of Director & Assistant Manager of the Vacuum Brake Co. Ltd., after over 50 years' service with the company.

We regret to record the death on April 6, during a train journey in Northumberland, of Captain Ernest William Swan, O.B.E. He was a Member of Council of the Newcomen Society, and was keenly interested in industrial history, particularly of the North-East Coast.

Mr. W. P. Lavender has been appointed Traffic Auditor of London Transport, in succession to Mr. H. N. Trye, who has retired, but whose services will be available for a further period in relation to matters arising out of the re-introduction of traffic clearances between London Transport and British Railways.

Road Haulage Association

The following appointments for 1948-49 have been made by the national council of the Road Haulage Association:—Chairman: Mr. B. G. Turner (Thomas Allen Limited, London); Vice-Chairmen: Messrs. Frank F. Fowler (Frank F. Fowler Limited, London), John Strang (Messrs. John Strang, Uddingston), Hartley Wilkinson (Peter Wilkinson Limited, Sunderland), B. Winterbottom (J. & H. Whittaker (Transport) Limited, Accrington, and J. Campbell (Darwen) Limited, Darwen).

Tribute to Mr. H. T. Dutfield

The following resolution was passed at the annual general meeting of the Road Haulage Association on April 8:—

The Road Haulage Association hereby places on record its deep appreciation of the invaluable services rendered by Mr. Henry T. Dutfield in his capacity as Chairman of the Association during the period 1945-48. The Association came into being on January 1, 1945, as the result of the amalgamation of a number of national and local associations, and as the first Chairman he assumed the onerous responsibility of welding together these different interests so that the industry might have one strong unified and vigorous association to protect the interests of road hauliers. That he succeeded in this difficult task is due to his wise guidance and inspiring leadership, and the unity thus achieved proved of inestimable value when the industry was called on to face the most critical stage in its history—the nationalisation of long-distance road haulage services. The magnificent fight which the Association put up against proposals that it thought to be inimical to the country's interests was largely inspired by Mr. Dutfield's courage and determination despite which the Transport Act, 1947, was passed. The vigour and strength which the Association has achieved during his term of office and the prestige which the Association enjoys are symbols of his outstanding success as Chairman during three very difficult years.

Midland Railway Co. of Western Australia Ltd.

The ordinary general meeting of the Midland Railway Co. of Western Australia Ltd. was held on April 6 in London, Mr. Robert W. Adeane, O.B.E. (Chairman of the company), presiding.

The Chairman said: Ladies and gentlemen,—First I have to apologise on behalf of my co-Director, Mr. Codrington, who is not able to be with us today, as he is on railway business in Nyasaland.

For the year ended June 30, 1947, nearly nine months ago, it is necessary to confront you with very disappointing results. I emphasise the lapse of nine months because some of you no doubt will have heard of Australia's excellent wheat harvest and the prosperity in the wool trade, and might hope to see some reflection of this in the accounts now under review. The railway earned gross £A211,000—£A5,000 more than last year—but this improvement was more than set off by an increase in expenses of nearly £A9,000. There is nothing extraordinary in that increase in expenses—I think it is a relatively moderate one in view of rising costs everywhere in the world today.

The operating profit was £A66,000 and included the company's road services. Following on the programme agreed after my visit to the company's properties, which I told you about last year, nearly £A61,000 has been put to depreciation and renewals account, and the major portion of this sum was spent on locomotives, carriages, wagons, new rails, and sleepers. I know this expenditure on renewals will appear large in relation to our operating profit, particularly to our income debenture holders. I can only assure you that it was necessary, both from the operating angle, for in recent months we have had more traffic to carry, and also for the reason, with which I am sure that you will agree, that a wise proprietor keeps his property in good repair.

Before leaving the accounts, I should tell you that arrears on the second mortgage cumulative debenture stock at 4 per cent. now amounts to £59,000, payable out of future profits.

The ratio of working expenses to gross receipts was 68·83, as against 66·25 last year. In tonnages, we carried slightly less goods and livestock, and 10 per cent. less wheat. Passenger traffic continues to fall off, but some of this falling off goes to our own railway-operated road services. These services have proved increasingly popular during the year. It is a profitable side of our business and one which we intend to develop. Capital expenditure during the year amounted to £12,000, and covered both our railway and road service requirements.

Forty-four sales of land were made during the year, and the area now remaining unsold is 557,000 acres. You must not put too high a value on that residual portion—to some extent, of necessity, the eyes have been picked out—but the demand for land still continues. As you know, money accruing from land sales has to be applied to redemption of the 4½ per cent. first mortgage debenture stock. A drawing of this stock took place on March 4, 1948, and £23,000 was drawn for repayment at par on June 30 next, reducing the outstanding amount to about £51,000.

With regard to prospects, a great area, sparsely populated like Western Australia, depends for its development and future prosperity on a sound and efficient railway network. To deny the railways the means of combating increased costs and demands of modernisation would be a short-sighted policy, particularly today, when harvests are excellent and prices for both grain and wool satisfactory to growers. In this connection, I am happy to announce that late last night we received this cablegram: "Government approval of immediate 33 per cent. increase in rates received." I do not want to be unduly optimistic, but with the good harvests and prosperity which exist in Western Australia today, this rate increase will go some way towards making a considerable improvemen in our p sition.

You will remember that last year I told you that to get over the problem of "long range control" we set up a local board. That local board has operated most successfully during the year under the chairmanship of Mr. Brisbane, ably supported by Mr. Jackson, K.C., and Mr. Holmes, who, as I told you, is a large agriculturalist and an extensive user of our line, besides being Chairman of one of the principal Roads Boards.

The appointment has been made recently of Mr. J. S. Dowson, M.B.E., as Assistant General Manager. Mr. Dowson is West Australian-born. He is an accomplished railwayman, with long engineering service on the G.I.P.R. Due to recent changes in India, he has become available to us at just the right time, as it gives us a "follow on" in management and covers our loss in that Mr. R. G. Drake, the General Superintendent, is due to retire on June 30 next. Mr. Drake has been with the company for 53 years, having entered our service in 1895. I saw a lot of Mr. Drake during my visit, and I have seldom met a man more loyal and enthusiastic for the company for which he worked. I am glad to say he has consented to stay on with us in an advisory capacity.

I think you will want me to express to the local board, the staff and employees, your thanks for their loyal and enthusiastic efforts on behalf of the railway during the year. I have to announce the retirement next June of Mr. Lewis, our Secretary, who has been with the company for 40 years.

The report and accounts were adopted unanimously.

The auditors (Messrs. Deloitte Plender Griffiths & Company) were re-appointed and the proceedings terminated with a hearty vote of thanks to the Chairman, directors and staff in Australia and London.

New and Modernised Equipment for Pennsylvania Railroad

Extended use of diesels included in $157-million programme

As part of a $157,000,000 post-war programme of expenditure for new equipment, building and improvement, Mr. M. W. Clement, President of the Pennsylvania Railroad, announced on March 25 the placing of orders for 114 additional diesel-electric locomotives and 2,300 goods wagons. These bring the company's total post-war orders for new equipment to 374 diesel locomotives, 4,400 goods wagons, and 395 passenger cars.

This is the first time the aggregate of the company's new equipment programme has been made known. The wholly new equipment will cost $149,000,000, and the modernising of other passenger stock, over $8,000,000. Mr. Clement said that out of a total of 257 sleeping, dining, and special passenger vehicles ordered early in 1946, only two cars had been received to date, due to difficulties encountered by the builders. While deliveries of new passenger cars, and especially of sleeping cars ordered more than two years ago, were disappointing, and continually were being deferred further for reasons beyond the company's control, they were making every possible effort to get new equipment completed and into service as soon as possible. They were now confident that deliveries would be under way in volume before the end of the present year. Mr. Clement added that deliveries had been received of 124 new post-war coaches and coach-train cars.

The company was well under way with one of the largest diesel locomotive installations in the country. By May this year they expected that all their important East-West through passenger trains would be handled by diesel power in the non-electrified territory west of Harrisburg, Pa. Their diesel shunting locomotive programme was also extensive. The wholly new equipment, together with that being modernised, would enable them to release from their most important trains existing lightweight equipment that was still distinctly modern, for use on other trains to replace older equipment. In this manner, the attractiveness, comfort, and convenience of their passenger equipment would be improved widely over the entire system.

The new sleeping cars now being built would be exclusively of the all-room type, and sleepers of this description would replace progressively the remaining open-section cars throughout the railway.

Of the new orders announced by Mr. Clement, the Electro-Motive Division of the General Motors Corporation will build eight main-line goods diesels, and six will be built by Fairbanks Morse. Of the diesel shunters, the Baldwin Locomotive Works will build 54, the American Locomotive Company 20, General Motors 14, and Fairbanks Morse 12. The total cost of these locomotives, main-line and shunting, will be $16,000,000.

The 2,300 goods wagons will be built at the company's Altoona Works at a cost of $11,500,000. Of these, 300 will be covered hopper wagons, and 2,000 will be open wagons of 70 tons capacity. All the freight cars are scheduled to be delivered this year and in early 1949. In addition to this newly-ordered equipment, 2,000 new steel wagons have been received since the war, and among them are a number of extra-size box cars, equipped with special load-securing devices for less-than-carload consignments.

To provide for the servicing and repair of diesel locomotives, new facilities have been built or are being built which ultimately will cost $16,500,000 when fully completed. In addition to the 124 new coaches and coach-train cars already in service, Mr. Clement stated that the railway has well under way a programme for the complete reconstruction and modernisation of 100 more coaches for use throughout the system. A number of other coaches and parlour cars are being modernised, embodying novel features of interior design and appoint-

ments, for use in the re-equipment of several important through trains.

The new passenger coaches already received have been used to re-equip the "Trail Blazer" and the "Jeffersonian," reserved-seat overnight coach trains between New York and Chicago, and New York and St. Louis. Other new coaches have been assigned to important east-west and north-south through trains. New observation and lounge cars have gone into service already on the "Trail Blazer" and the "Jeffersonian."

As new sleeping, dining, lounge and observation cars now under construction are received from the builders, Mr. Clement explained, they will be used to provide entirely new trains for the "Broadway Limited," the "General," the "Liberty Limited," the "Spirit of St. Louis," the "Pittsburgher," the "Golden Triangle," the "Cincinnati Limited," and the "Sunshine Special." The "Senator" afternoon train between Washington and Boston, and the "Congressional," between New York and Washington, will be turned out as new trains, with completely modernised equipment. A modernised train will be provided also for joint service between Chicago and Detroit, matching a similar train to be supplied by the Wabash Railroad.

AIR SURVEY OF BOURNEMOUTH STATION.—An experimental aerial survey of Bournemouth Central Station has been undertaken for British Railways by Hunting Aerosurveys Limited. Plans of the station at a scale of $\frac{1}{480}$ have been prepared from the air photographs.

REMOTE CONTROL OF LONDON TRANSPORT SIGNAL BOXES AT HARROW.—Finishing touches are being put by London Transport engineers to a remote-control signal installation covering a section of the Metropolitan Line at Harrow-on-the-Hill. A master signal box in a tower above Harrow-on-the-Hill Station contains a row of 40 manual levers, which actuate levers in three automatic signal boxes. Two of the automatic frames are housed in boxes north and south of Harrow, and one in the station itself. They control an important junction passed over by Metropolitan, Uxbridge Line, and Eastern Region main-line trains. The installation, apart from a much smaller version installed at North Acton, is the first of its kind in Britain, and is part of a scheme, including extensive track alterations, to improve the service on the Metropolitan and Uxbridge Lines. The new signalling will be brought into service tomorrow, April 17.

WESTERN EUROPEAN ROAD TRANSPORT AGREEMENT.—Certain Western European nations and zonal authorities of the Western Powers in Germany have agreed at the U.N. Economic Commission for Europe to grant all possible facilities for road transport through and between their territories, as a result of which pressure on rail and waterways is expected to be relieved. The agreement covers transport of goods and passengers, and international tourist traffic. Customs formalities are to be simplified and the Commission's Working Party on Highways is studying methods for prevention of waste of available road carrying capacity and elimination of "return empty" journeys by lorries. The working party is also considering which routes should be equipped specially for international traffic, and how improvements and construction of new highways should be financed. Other U.N. Western European governments are to be invited to participate in the agreement.

Results of the Staggering Campaign

Although London passenger traffic conditions have shown no discernible improvement, the Minister of Transport states that they would have been worse still without staggering of hours

Results of the staggering campaign inaugurated in November, 1946, were summarised by the Minister of Transport, Mr. Alfred Barnes, at a Press conference in London on April 8.

The Minister said that fourteen committees, representative of employers, trade unions, local authorities and business associations in fourteen traffic zones in the central area of London had begun their work by sending a questionnaire to nearly 2,000 firms, each employing over 100 workers, asking the numbers starting and finishing work at various hours. Returns were received from over 1,300 firms, with staffs totalling 350,000. It was found that, after excluding those firms which had already introduced staggering schemes, or whose hours of business brought them outside the peak periods, there remained 314 firms, employing about 125,000 staff. To these firms the committees put forward individual proposals for staggering their hours of business, following up the initial approach with meetings and individual interviews. In their report the committees paid a tribute to the co-operative response made to their proposals by managements and staffs alike.

In consultation with the transport undertakings, the committees set themselves a target of the transference of 120,000 persons out of the 5-6 p.m. finishing period with the consequent adjustment in starting times, and a uniform dispersal in every quarter hour between 4.30 and 6.30 p.m.

By the end of last year, 94,000 persons had staggered their hours of work. Of these, 50,000, including 22,000 civil servants, had been transferred out of the 5-6 p.m. period, while 44,000 had altered their hours within this period. These results represented an achievement of approximately 50 per cent. of the target. Other adjustments covering a further 56,000 persons were being considered.

EFFORTS NULLIFIED BY POPULATION INFLUX

The fact that travel conditions had not improved so greatly as was hoped was due mainly to the increase during 1947 of well over 100,000 in the number of insured workers in the Central London area. In view of that increase it was certain that, without the results already achieved by the campaign, travel conditions would have been much worse. This was the view expressed by officers of the Railway Executive and the London Transport Executive.

Another chief cause of the present travelling difficulties, in the opinion of the committees, was the decline of social activities in the West End during the evening. It had been suggested that later closing of catering establishments would enable workers to obtain refreshments before going home or attending an evening entertainment. The adoption by the majority of West End theatre managements of a 7 p.m. evening performance, instead of 6.30 or 6.45, was regarded as a step in the right direction, and it was thought that cinema exhibitors could also help in delaying the homeward rush by the later timing of the last showing of films at suburban cinemas.

Unfortunately, this question was closely bound up with the difficult problem of the closing time of West End shops. Both the Caterers' Association of Great Britain and the Cinematograph Exhibitors' Association were ready to recommend their members to fall into line, provided that public demand was stimulated by the later closing of shops. The present practice of closing large stores in the Oxford Street area at 5.30 p.m. meant that 22,000 shop workers, and probably many thousands of shoppers, were daily projected into the homeward-bound traffic at the height of the rush-hour period. Prolonged negotiations had been carried on between the shops and the Ministry, but the problem had not yet been resolved.

CLASH OF TRAFFIC STREAMS

Another point brought out by the committees' investigation was the clash of traffic from the City and the West End with the traffic from neighbouring areas. Efforts had been made to persuade firms in the neighbouring areas to finish work before 5 p.m. so that their workers could disperse before the City and West End traffics passed through. Where this had not been possible, the inevitable result had been that the outer areas were swamped by the surge of traffic from the centre and the position became steadily worse up to 6 p.m. For this reason the committees had suggested that a proportion of the road services should terminate on the periphery of Westminster, Holborn, and the City of London. This was not considered sound practice from an operational point of view, however, and should be resorted to only in exceptional and extreme cases.

The Minister appealed to managements and staffs who had not joined in the campaign to give immediate and favourable consideration to the proposals which had been put to them. The transport operators had done all in their power to meet the traffic demand. During the past year many miles of new line had been opened on the Underground system, more coaches of higher capacity had been introduced on the Southern Region, and the operation of peak period road and rail services had been extended by half an hour. Nevertheless, the fact remained that no appreciable improvement of services was possible in the near future.

TRANSPORT OFFICERS' REPORT

A memorandum by officers of the Railway and London Transport Executives was issued at the same time as the committees' report and the Minister's speech; signatories are S. A. Fitch, Assistant Superintendent of Operation (Southern Region), J. B. Burnell, F. G. Maxwell and T. W. Towers, London Transport operating managers of, respectively, central buses, railways, and trams and trolleybuses.

Redistribution of traffic during the evening peak period for one day in November, 1947, compared with one day in October, 1946, is illustrated by the following table.

	4.30–5.0	5.0–6.0	6.0–7.0
Road services ...	+8,200	+3,100	−2,000
Underground ...	+6,200	−3,300	+1,000
Railways	+4,600	−7,300	−2,300

The figures for railways are the result of a census of people entering all the central area main-line stations, but do not indicate the numbers actually travelling by trains during the specific periods.

It is pointed out that underground extensions have induced further traffic movements which did not exist previously, while the relief afforded to road transport has been absorbed by other local traffics which formerly were excluded because of the lack of accommodation.

In conclusion, causes for the continued congestion are summed up as: delays in acquiring new rolling stock and constant withdrawals due to obsolescence; the tendency to increase employment in Central London and delays in rehousing of population in Central London; and the development of housing estates outside Central London and delays in providing local industries to obviate travel into London.

Revised Export Targets for 1948

Despite the realist approach taken by Sir Stafford Cripps in his announcement last September, of the export targets for the end of 1948, a number of the original targets subsequently have proved unrealistic in the light of the steel supplies which are likely to be available this year. In his statement to a press conference on April 13, Mr. Harold Wilson, President of the Board of Trade, revealed that considerably less steel will be available for use in the engineering industries than would be required to meet the original targets, and this shortfall has made it necessary for many targets in the machinery and vehicles groups to be reduced substantially. The end of 1948 export target for the vehicles, ships and aircraft group has been reduced from 319 to 260 per cent. of the 1938 volume, though the target for railway locomotives and rolling stock, which come into this group, is unaltered, at £2·4 million. The target for iron and steel manufactures also remains the same, at £8·1 million, though that for electrical goods and apparatus has been increased from £5·5 million to £6·6 million, and for private cars and commercial vehicles reduced from £12·6 to £9 million.

Because the possibility of increasing other of our export targets in 1948, is limited by the requirements of the home market, or the inability of foreign markets to absorb more of the goods in question, it consequently is important to expand the production of textiles, and certain of these targets have been increased sharply.

The principal difference between the new export targets and those announced last September is that the new target for United Kingdom exports as a whole, is set at 150 per cent. of the volume of our 1938 exports, instead of the original 160 per cent. The actual sum of the end of 1948 targets is 154 per cent. of the volume in 1938, though as some allowance must be made for the possibility that shortfalls in some industries are not balanced by surpluses in others, the revised national target is now expressed as a volume of exports equal to 150 per cent. of 1938.

In fixing the new targets, an important change has been made, compared with the procedure for those evolved last September. Instead of being stated in terms of end of 1946 prices, the new targets are expressed in terms of the price level for the end of 1948, based on an assumed rise in export prices of 5 per cent. this year. It is hoped that this measure will enable industries to see the actual monetary value of the exports that will be required for achievement of the targets.

Parliamentary Notes

Questions on Socialised Industries

Mr. Ellis Smith (Stoke—Lab.) at the end of questions in the House of Commons on April 7 asked for the Speaker's ruling on three questions which he desired to ask and which had been refused. It was a question of the interpretation of what came within the everyday running of the nationalised industries. In his view the questions did not involve the daily management of the industries. They were questions concerning the broad policy which Members of Parliament should be able to urge on Ministers, who should, in the public interest, urge it on the managements to adopt. That raised in a new form the issue of the relationship between Parliament and the nationalised industries. The vital democratic rights of the people's elected representatives were involved. He had read carefully the rules on the admissibility of questions, and nothing was said on this matter. The Lord President of the Council had said on March 3 last: "None of us had better be final, conclusive, or dogmatic about this matter. This is a question about which we have to learn as we go along."

The Speaker (Colonel D. Clifton Brown) said he had been asked for his reasons in refusing three questions which Mr. Ellis Smith wished to ask the Minister of Transport, one about special trains, one about cheap fares, and the third about the general administration of the nationalised railways.

On March 1 the Minister, in answer to a question asking him to issue directions to the Transport Commission to run no special trains, had refused, and had said the matter was one in the discretion of the Commission; while on February 2 he had refused to answer questions on the issue of cheap tickets or to interfere in the day-to-day operations of the Commission. It seemed to him that Mr. Smith's questions were covered by those answers, and that, under the existing rules, he had no option but to refuse them. It was for the House to decide what the rules should be and to change them if it pleased. He could only add the words, quoted by Mr. Smith, of the Lord President on March 3.

Mr. Ellis Smith thanked the Speaker for his ruling, which he would in no way attempt to question; but he asked the Speaker to bear in mind, between now and the time when the question was next considered, that the right of the British Member of Parliament to interrogate Ministers was looked on throughout the world as most important. He hoped a most generous interpretation would be put on the matter.

Mr. W. Gallacher (West Fife—Comm.) asked if they were to be told that, if the people of this country felt that special trains should be run at a particular time and expressed that feeling to the Minister through their Members of Parliament, the Minister was incapable of passing that desire on to the board of the nationalised industry.

The Speaker replied that that was a matter for the Minister's responsibility, and not for his.

Colonel Oliver Stanley (Bristol West—C.) asked if it would be in order for him to call the attention of the Leader of the House to the fact that the Speaker had been placed in an unfortunate position by the rules, and whether they could have an opportunity of amending them.

The Speaker said that no doubt Colonel Stanley would remember that at the beginning of March they had discussed that matter for half a day.

Colonel Stanley said he had in mind the Speaker's concluding words that this was not a matter on which they could yet have a final opinion.

The Speaker said he had merely been quoting from the Leader of the House.

Earl Winterton (Horsham—C.) asked if the Speaker's ruling applied only to questions. Would it be out of Order to raise matters such as the one raised by Mr. Ellis Smith on the motion for the adjournment, or would the Speaker rule that it was not in Order because it was not within the Minister's competence?

The Speaker said that Lord Winterton had asked a useful question. The rules relating to questions were much stricter than those about debates. Any of these matters could be taken up on any evening by the Member who was lucky in securing the adjournment, and it would be in Order to discuss them.

Questions in Parliament

Railway and Water Supply

Mr. T. E. N. Driberg (Maldon—Lab.) on April 8 asked the Minister of Health if he was aware that a number of permanent residents and holiday campers at Althorne, Essex, who had been accustomed for many years, on payment to the railway company of five shillings a year, to obtain their supply of water from a tap at Althorne Station, had been notified that that facility was to end on April 24; and if he would take steps to ensure that an adequate supply of water was made available to them by that date.

Mr. Aneurin Bevan (Minister of Health): I am informed that the Maldon Rural District Council is arranging for a supply of water to be continued to the permanent residents after that date. As regards the holiday campers, I am in communication with the council and will inform Mr. Driberg of the result of my inquiries.

Mr. Driberg: Since it is unlikely that any satisfactory main water supply can be laid on at this particular site, does the Minister envisage a water cart, or something like that, as a satisfactory semi-permanent solution; or would he consider approaching the British Railways and asking them to continue or to improve the present arrangement?

Mr. Bevan: I shall not approach the railway until it becomes necessary.

Advertising by Socialised Industries

Mr. C. N. Thornton-Kemsley (Kincardine & West Aberdeen—C.) on April 6 asked the Chancellor of the Exchequer if he had made a request, similar to that made to the Federation of British Industries, to the boards of the socialised industries to reduce voluntarily their expenditure of money and materials on advertising.

Mr. Douglas Jay (Economic Secretary to the Treasury): The plan of action formulated by the Federation of British Industries was brought to the notice of the boards of the socialised industries.

Mr. Thornton-Kemsley: Will the Economic Secretary look into the apparently gross waste of manpower and materials involved in the advertising activities of London Transport, and will he consider also if it is necessary for a State monopoly to publicise its activities at all?

Mr. Jay: I think there are good reasons for some amount of advertising, but I understand that some reductions have

already been made as a result of these representations.

Lt.-Commander L. W. Joynson-Hicks (Chichester—C.): Will the Minister go further, and bring this point to the notice of the Transport Commission? Will he also make a similar appeal to them as was addressed to the Federation of British Industries?

Mr. Jay: Exactly the same procedure has been followed as in the case of private undertakings.

Exports of Rails to Russia

Sir John Mellor (Sutton Coldfield—C.) on April 7 asked the President of the Board of Trade why the Government had diverted to Russia rails purchased for export to other destinations.

Mr. J. W. Belcher (Parliamentary Secretary, Board of Trade): Rails were an important factor in last year's trade negotiations with Russia as a result of which we are now receiving valuable supplies of coarse grain. On this account there was a temporary suspension of releases of surplus rails by His Majesty's Government last summer while negotiations were proceeding between the two Governments, but releases against a number of export orders were later permitted, and I am not aware that any rails actually purchased for export to other destinations were diverted to Russia.

Sir John Mellor: Will the Parliamentary Secretary be prepared to consider evidence which will prove the contrary?

Mr. Belcher: Most certainly.

Mauritius Railway Staff Salaries

Mr. Anthony Greenwood (Heywood & Radcliffe—Lab.) on March 24 asked the Secretary of State for the Colonies what reply had been sent to the joint request of the Mauritius Railway Workers' Union, the Teachers' Union, and the Government Employees' Association for increased salaries for all Government employees, in view of the greatly increased cost of living; and why the Mauritius Government had proposed increases for senior officers without any increases for lower-grade workers.

Mr. A. Creech Jones (Secretary of State for the Colonies): I assume Mr. Greenwood refers to a joint request from the three unions for increases in cost-of-living allowances. No joint request for increased salaries has been received. Proposals submitted by the Governor of Mauritius for increases in cost-of-living allowances for all grades, but giving greater proportionate benefit to the lower and middle ranks, have recently received my approval. As regards the last part of the question, proposals for increasing the salaries of certain posts were submitted by the Governor last year on the grounds that the salaries assigned to these particular posts in 1945 were inadequate. These proposals covered a number of both senior and subordinate posts.

Mr. Greenwood: Will the Minister say what delay elapsed between receiving these requests and complying with them, and whether he is satisfied that the negotiating machinery is satisfactory?

Mr. Creech Jones: At the moment, I believe it is, but the first request was made in 1945, and subsequent adjustments have been made.

Kenya & Uganda Railways Welfare Officer

Mr. E. H. Keeling (Twickenham—C.) on March 17 asked the Secretary of State for the Colonies what were the salaries and allowances of Mr. R. W. Osgathorp, Welfare Officer to the Kenya & Uganda Railways, and Mr. J. S. Patrick, Trades Union Officer to the Kenya Government; what had been their previous party affiliations and colonial experience; and whether applications for those posts had been invited in the Colonies.

Mr. A. Creech Jones (Secretary of State for the Colonies): The present salaries of these officers are £1,000 and £743, respectively. In addition they receive cost-of-living allowances of £28 and £172 respectively. Candidates for Government appointments in the Colonies are naturally not required to disclose their political affiliations.

Neither officer had previously had Colonial experience, but both have a wide knowledge of trade union practice in this country. Applications for the posts were invited through the medium of trades unions in the United Kingdom, as it was desired by the Kenya Government and the Kenya & Uganda Railways Administration, with my full support, to obtain the services of men with this experience.

Mr. Keeling: Would the Secretary of State answer the second part of the question, which was not what party affiliations they disclosed, but what, in fact, their party affiliations were?

Mr. H. Hynd (Hackney Central—Lab.): Can the Minister say whether he has had satisfactory reports of the work these men are doing?

Mr. Creech Jones: I have had the most satisfactory reports in respect of both men.

Notes and News

Head Foreman Required.—A head foreman, under 40 years of age, is required by an East Midlands iron foundry. Candidates must have had experience of jobbing plate and machine moulding. See Official Notices on page 475.

Clerical Assistant Required.—A clerical assistant, preferably under 35 years of age, with knowledge of sales department routine (home and export trade) is required by a firm in Yorkshire in its railway section of sales department. See Official Notices on page 475.

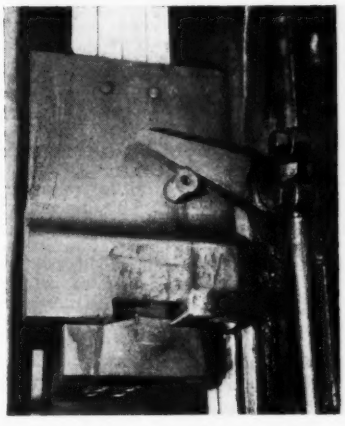
Entre Rios and Argentine North Eastern Registers.—Both the Entre Rios Railways Co. Ltd. and the Argentine North Eastern Railway Co. Ltd. have announced that their registers of members will be closed on April 27, 1948, and that no further transfers of the preference and ordinary stocks of these companies will be accepted by the liquidators for registration after that date.

Russian Traffic Restrictions Extended to Vienna.—British troops moving between the British zone in Austria and Vienna have been subjected this week to restrictions by the Russians similar to those obtaining in Berlin, as reported in our April 9 issue. Trains travelling in both directions have been delayed at Semmering, where they were eventually allowed to proceed, although the British refused to show more than the usual travel pass to the Russian guards, who asked for identity cards with photographs. Similar obstructions have been applied to road traffic, in contrast to Germany, where passenger traffic by road continues normally. The position in Germany was summed up by Mr. Mayhew, Parliamentary Under-Secretary to the Foreign Office, who stated on April 9, in reply to a question by Mr. Wilson Harris, M.P., that military passenger trains between Berlin and the western zones had been suspended until further notice. One civilian passenger train with a "Nord Express" connection was running daily in each direction. Freight traffic from the British zone to Berlin was virtually uninterrupted, but freight traffic in the reverse direction was suspended while the Russians refused to allow this movement without special permits; the normal movement of empty wagons from Berlin westwards continued as usual.

Railways (Acceptance of Merchandise) (Revocation) Order.—The Minister of Transport on April 1 made the Railways (Acceptance of Merchandise) (Revocation) Order, 1948.

Railway Wagons (Notification of Particulars & Plating).—The Minister of Transport on March 30 made the Railway Wagons (Notification of Particulars & Plating) (Revocation) Order, 1948.

New Type of Drop-Hammer Trip Bar.—A trip bar in a Chambersburg drop stamp hammer at the works of Thomas Smith & Sons of Saltley Limited was replaced last year by a Tufnol tube, as lignum vitæ, the material normally used for the purpose, was unobtainable. Tufnol Limited now reports that the Tufnol tube is still in use after five months, compared with the one month's life of a lignum vitæ bar. The new trip bar is a tube



The board hammer photographed as the Tufnol tube strikes the metal lever

11 in. long and has a diameter of 3 in. with a 1-in. bore. On the upward stroke of the hammer, the trip bar, which is fitted to the tup on each board hammer, strikes a metal lever on the pole, which in turn operates the mechanism releasing the hammer for its next downward stroke. Important characteristics of the bar are tensile strength and resilience sufficient to counteract the effect of forcibly striking the metal lever, an operation usually performed 8,000-9,000 times during an 18 hr. working day. Tufnol Limited states that, although the tube must have suffered approximately one million knocks since its installation, it is still giving really reliable service.

Zonal C. & D. in Southern Region.—With the object of facilitating overnight delivery for small consignments of goods train traffic between any two stations, zonal schemes for collection and delivery had been introduced by the railways before nationalisation, the whole of the former G.W.R. system, for example, having been covered by the end of October, 1947, as described in our October 24 and 31 issues last year. Similar measures undertaken by the L.M.S.R. were described in our January 24, 1947, issue. The policy is

being pursued by British Railways, and on April 1 a zonal scheme was introduced in the Southern Region, with railhead at Surbiton and sub-railhead at Hampton Court, and embracing the following stations:—

Surbiton	Malden
Worcester Park	Claygate
Oxshott	Cobham
Tolworth	Chessington South
Hampton Court	Esher

Local railway representatives will help traders in this matter, and explain fully how zonal collection & delivery services can assist their transport requirements.

U.S.A. Coal Strike Brings Further Rail Cuts.—The United States Office of Defence Transportation on April 9 ordered coal-burning passenger and goods train services to be cut to half from midnight on April 15 because of the continued strike of the 400,000 soft-coal miners. This represents a further 25 per cent. reduction on top of that imposed on March 21, as reported in our April 9 issue.

Shunting Locomotives for Burma Railways.—With reference to the article in our April 9 issue, dealing with the new 2-6-4 shunting locomotives for Burma Railways, we have been informed that these locomotives are fitted throughout with the Ajax system of grease lubrication, which includes axlebox lubricators and hard and soft grease pumps, as well as corresponding nipples fitted to the rods and valve gear.

B.E.T. Road Passenger Transport Award.—The council of the Institute of Transport has accepted with thanks an offer by the British Electric Traction Co. Ltd. to donate an award, for presentation by the council of the Institute, to the author of an original paper, which, in the opinion of the council, makes an outstanding practical contribution to the advancement of the science and art of road passenger transport operation or administration. The award, which will be known as the "B.E.T. Road Passenger Transport Award," will be available once in three years, and will be open for competition by members and non-members of the Institute; the first award will be available in 1950. Further details will be announced later by the Institute of Transport.

Thomas Tilling Sale Negotiations.—Thomas Tilling Limited has announced that the preliminary negotiations between the company and the British Transport Commission for the sale of the company's road transport undertakings are proving more protracted than had been foreseen, and that until they are completed, final negotiations cannot be begun. No accurate indication can be given of the further length of time required, but shareholders will receive another communication as soon as developments of an important kind have taken place.

Formation of Surrey Group, Institute of Transport, Metropolitan Section.—The inaugural meeting of the Surrey Group of the Institute of Transport, Metropolitan Section, will be held at the premises of F. Ayers & Sons, 90, High Street, Guildford, at 7 p.m. on Friday, April 23; light refreshments will be available from 6.30 p.m. Sir Godfrey Armstrong, Acting Chairman, will preside at the meeting, and the agenda includes a short address on "Transport" by Mr. David R. Lamb, M.Inst.T., Editor of *Modern Transport*. A chairman, honorary secretary, and committee of not more than eight members will be elected.

Stephenson's Cottage Preservation Fund.—The North East Coast Institution of Engineers & Shipbuilders has instituted a fund to acquire the cottage at Wylam in which George Stephenson was born, with a view to presenting it to the National Trust for permanent preservation as a memorial. It is estimated that £1,200 will be required to purchase the cottage and its freehold site, to cover repairs, and to provide a sum to be handed to the National Trust for upkeep. It is proposed to bring the cottage up to the housing standards of the Local Authority, and that it shall continue to be tenanted. Contributions towards the fund will be received gratefully, and should be sent to the Secretary, North East Coast Institution of Engineers & Shipbuilders, Bolbec Hall, Newcastle-upon-Tyne, 1. Cheques should be made payable to "N.E.C. Inst. E. & S. (Stephenson Cottage A/C.)" and be crossed "Barclay & Co."

Motorcar Ferries to be Restored.—From June 1 to September 26 daily motorcar ferries will be operated by British Railways on the following routes: Dover—Boulogne, Folkestone—Calais, Newhaven—Dieppe, Dover—Dunkirk, and Dover—Ostend. Motorists landing in France are allowed coupons for 33 gal. of petrol.

A.E.C. and Crossley Motors.—The acquisition by the Associated Equipment Co. Ltd. of the Crossley Motors undertaking, and the consequent increase in A.E.C. capital, together with alterations to the articles of association of A.E.C. recommended by the directors, were all approved by special resolutions of the extraordinary general meeting of stockholders held on April 5.

Road Accidents in February, 1948.—The return issued by the Ministry of Transport of the number of persons reported to have died, or to have been injured, as a result of road accidents in Great Britain during the month of February last, shows 305 deaths (compared with 223 in February, 1947), 1,939 seriously injured (compared with 1,355 in February, 1947), and 6,633 slightly injured (compared with 5,570).

Voluntary Winding-up of Anglo-Argentine Companies.—Notices appear in *The London Gazette* of April 6 relating to special resolutions which have been passed to the effect that the following companies be wound up voluntarily (the names of those appointed as liquidators are given in each case):—

Argentine Great Western Railway Co. Ltd. (Messrs. B. H. Binder and C. E. Rich); Villa Maria & Rufino Railway Co. Ltd. (Messrs. B. H. Binder and C. E. Rich); Buenos Ayres Midland Railway Co. Ltd. (Messrs. B. H. Binder and N. F. E. Grey); Buenos Ayres Western Railway Limited (Messrs. B. H. Binder and N. F. E. Grey); Bahia Blanca Water Works Co. Ltd. (Messrs. B. H. Binder and N. F. E. Grey); Buenos Ayres & Pacific Railway Co. Ltd. (Messrs. B. H. Binder and C. E. Rich); Central Argentine Railway Limited (Messrs. B. H. Binder and A. S. Matthews); Bahia Blanca & North Western Railway Co. Ltd. (Messrs. B. H. Binder and N. F. E. Grey); Argentine North Eastern Railway Co. Ltd. (Messrs. B. H. Binder and H. J. Binder); Buenos Ayres, Ensenada & South Coast Railway Co. Ltd. (Messrs. B. H. Binder and N. F. E. Grey); Buenos Ayres Great Southern Railway Co. Ltd. (Messrs. B. H. Binder and N. F. E. Grey); Buenos Ayres Southern Dock Co. Ltd. (Messrs. B. H. Binder and N. F. E. Grey); Entre Rios Railways Co. Ltd. (Messrs B. H. Binder and H. J. Binder).

London Railwaywomen Win L.M.R. Ambulance Contest.—With a score of 334 out of a possible 375, the Somers Town (London) team won the Women's Ambulance Competition organised by the London Midland and Scottish Regions at Blackpool on April 7, 1948, in which 13 teams of English, Scottish, and Irish railwaywomen took part. Second place was taken by the Glasgow "A" team with 321 points, and third place by Manchester. The remaining competitors in order of merit were Horwich (Lancs.), Birmingham (Lawley Street), Sheffield, Blackpool, Glas-

New Southern Region Spring Poster

One of the posters issued by the Southern Region this Spring to advertise various resorts in the West Country and Southern England

OFFICIAL NOTICES

None of the vacancies on this page relates to a man between the ages of 18 and 50, inclusive, or a woman between the ages of 18 and 40, inclusive, unless he, or she, is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

CLERICAL ASSISTANT, preferably under 35 years of age, with knowledge of Sales Department routine (Home and Export Trade), and with general engineering or drawing office background, required as Assistant in Railway Section of Sales Department. Applications stating experience and salary required should be addressed to: BRITISH BELTING & ASBESTOS LIMITED, Cleckheaton, Yorkshire. By permission of the Ministry of Labour & National Service, under the Control of Engagement Order, 1947.

ALUMINIUM: Capacity available for gravity and pressure die casting. Large modern plant.—Box DX360, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

BOILER TUBE BRUSHES, card file type. Most sizes available, new condition. Enormous savings. Apply illus. list, G.T.C., 82-94, Seymour Place, London, W.1.

HEAD FOREMAN required by East Midlands Iron Foundry producing approximately 40 tons grey-iron castings per week. Must be energetic man (under 40) with sound experience of jobbing plate and machine moulding. Also some experience of core shop and cupola control. Permanent position for man of proved ability. State age, salary required, and full details of previous experience.—Box 47, *The Railway Gazette*, 33, Tothill Street, London, S.W.1.

MECHANICAL APPLIANCES FOR HANDLING RAILWAY TRAFFIC. By G. Bulkeley. An explanation of the employment of mechanical apparatus for handling and carting general goods. Cloth. 7½ in. by 5 in. 132 pp. Illustrated. 5*s*. *By post* 5*s*. 3*d*.

THE EVOLUTION OF RAILWAYS. Second edition, revised and enlarged. By Charles E. Lee. Traces the germ of railways back to Babylonian times. Cloth. 8½ in. by 5¼ in. 72 pp. Illustrated. 6*s*. *By post* 6*s*. 4*d*.

FIRST PRINCIPLES OF RAILWAY SIGNALLING. By C. B. Byles. Most treatises on railway signalling are intended for the railway signal engineer, but this is an elementary treatise. Cloth. 7½ in. by 5 in. 146 pp. Illustrated. 4*s*. *By post* 4*s*. 3*d*.

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gow (St. Enoch), Carlisle, Dublin, Chester No. 2, Chester No. 1, and Glasgow "B." Mr. H. J. Comber, Chief Officer for Labour & Establishment, L.M.R., presided at the presentation of prizes by the Mayoress of Blackpool, Mrs. T. Furness.

Douglas High-Lift Trucks.—Increasing demand for the High-Lift truck, which was described and illustrated in our issue of September 6, 1946, called for a reorganisation of the factory of Douglas (Kingswood) Limited to speed production. As a result of this reorganisation trucks now can be delivered within a week or two of ordering.

British Oxygen Co. Ltd.—Audited figures for 1947 show a net profit of £721,583, comparing with £668,858 in the preceding year, which figure included also a special item of £150,000 in respect of E.P.T. adjustment. A final ordinary dividend of 12 per cent. has been recommended, making a total for 1947 of 20 per cent., as in the preceding year.

G.I.P.R. Annuitants.—Sir Charles Armstrong, Chairman of the Annuity Trustees, said at the recent meeting of the Great Indian Peninsula Railway Annuitants, that the distribution of the sinking fund to the Class "B" Annuitants would exceed by £11 or more the sum of £26 2s. per £1 of annuity which it had been estimated that the "B" annuitants would receive. The first payment, to be made at the end of August, would be £36, to be followed, probably in November, by a final amount of 20s. per £1 of annuity, or even slightly more.

Vickers Dividend and Results.—At a meeting of the board of Vickers Limited held on April 2, it was decided to recommend for approval at the annual general meeting, to be held on May 14, a final dividend on the ordinary stock of 8½ per cent. actual, less income tax, making 12½ per cent. for the year ended December 31, 1947 (same as 1946). Subject to such approval, payment will be made on May 15. Net profit of Vickers Limited for the year, after providing for taxation, etc., but before transfer to sinking fund, is £1,225,238 (£1,076,224 in 1946). Certain reserves and provisions in the accounts of subsidiary companies no longer required for the purposes for which they were created, and amounting to £4,513,767 (nil, 1946), were transferred to the reserves of the parent company. The transfer to sinking fund for redemption of 4 per cent. first mortgage debenture stock is £21,444 (£20,620 in 1946). The carry-forward is £1,570,488 (£1,123,001 in 1946). The consolidated accounts show a net profit of £2,399,394, as against £1,255,050, and a carry-forward of £4,985,457 (£3,592,062 in 1946); a sum of £526,852 for tax on certain provisions made during the year is carried in suspense, and to such extent has relieved the taxation charge for the year. Net assets are £45,203,659 (£40,781,791 in 1946).

Canadian National Railways Deficit.—The Canadian Minister of Finance, Mr. D. C. Abbott, stated on March 21 that there was a deficit of $8,961,000 in the results of the Canadian National Railways for 1947, comparing with a surplus of $24,756,000 in 1946. Among the items contributing to the deficit was the annual interest payment of $44,000,000.

North British Locomotive Co. Ltd.—The trading profit for 1947 amounted to £305,298, as against £287,709 in the previous year. After increased deductions for depreciation (£50,000) and taxation (£131,000), the net profit was £124,845, as against £138,513 in the preceding year. The board proposes transferring £60,000 (as against £66,895) to general reserve, and paying an ordinary dividend of 5 per cent., as in 1946, which leaves £61,185 to carry forward, as compared with £51,340 brought in.

Skefko Ball Bearing Co. Ltd.—At a meeting of the directors of the Skefko Ball Bearing Co. Ltd., held on March 24, it was decided to recommend a final dividend of 7d. per stock unit of 5s., free of income tax, making 10d. per stock unit of 5s., free of income tax, for the year 1947. The net profit for 1947 amounted to £197,669, as compared with £165,385 for 1946. Both these figures have been arrived at before taking into account income tax on initial allowances on purchases of new buildings and machinery.

Malines-Terneuzen Railway Working Agreement.—By an agreement reached between the Belgian National Railways and the Netherlands Railways, the working of the Malines-Terneuzen Railway has been divided between these administrations since January 21 this year. Previously, the lines had been worked by the Compagnie Internationale du Chemin de Fer Malines-Terneuzen, under a concession granted on June 16, 1868, which was to have expired on August 26, 1961. The length of line in Belgian territory is about 44 km., and in Holland about 24 km., these sections now being operated by the countries concerned.

Moulding and Casting Machines at B.I.F.—Plastic moulding machines and equipment, die-casting machines, and small tools and measuring equipment will be shown at three separate stands (D.216, D.319, and 310 respectively) at the Castle Bromwich, Birmingham, section of the British Industries Fair by Alfred Herbert Limited, from May 3 to 14. Under the first heading a Daniels 150-ton hydraulic moulding press, with a 12-in. main ram and a maximum stroke of 14 in., and a Shaw extruding machine for solid sections or tube in thermoplastics, will be among the exhibits. At stand D.319 a cold chamber die-casting machine for aluminium castings and a remodelled die-casting machine capable of 400-500 shots per hr., with simple dies, will be on view.

Super Oil Seals & Gaskets Limited.—At the annual general meeting of Super Oil Seals & Gaskets Limited at Birmingham on March 12, the Chairman & Managing Director, Mr. R. Hugh Roberts, reported that net profit for the year, after providing for taxation, including £10,000 necessitated by the new profits tax, was reduced from last year's level of £28,419 to £22,946. During the year, office and drawing office space had been increased and staff amenities improved to the value of £3,600. A further £5,000 had been spent on plant and machinery. The £500 investment in Ecsos Limited, the development company set up last year jointly with Engineering Components Limited, was already showing good results. It was hoped that the pooling of technical and sales resources would result in a far richer harvest, particularly in overseas trade.

An Unusual London Transport Problem.—On Sunday, April 11, the largest one-piece flash fractionating column ever produced in this country for export and weighing 108 tons, left the Greenwich works of G. A. Harvey & Co. (London) Ltd. on the first stage of its journey to an oil refinery in Venezuela. To reach the Royal Albert Dock, which is only two miles from the works on the opposite side of the river, the column, which is of all-welded construction and has a height of 83 ft. 4 in. and an inside diameter of 10 ft., had to make a detour of 35 miles through London streets, crossing the Thames at Lambeth and taking 15 hr. for the journey. During the voyage to South America, the column will be filled with air at 25 lb. per sq. in., which will guarantee its water-tightness when dumped in the sea at Punta Cardon for floating ashore, there being no orthodox landing facilities.

L.M.R. Best-Kept Stations Competition.—Over 550 stations in England and Wales, an increase of 183 stations over last year, have entered for the British Railways, London Midland Region, 1948 Best-Kept Stations competition. Stations in blitzed or industrial areas will receive a special allowance of marks to compensate for unfavourable local conditions; among the features to be considered by the judges will be flower and shrub cultivation, general cleanliness of platforms, waiting rooms, and other amenities, and the neatness of timetable and poster displays. Judges will

make two surprise visits to each station, one in winter and one in summer, so that points may be awarded on a year-round standard of neatness. The staffs of winning stations will receive money prizes when the results of the competition are declared at the end of the year. Twenty-two operating districts are represented in the competition and the number of prize-winning stations varies from five to eleven, according to the size of each district.

Atomic Energy Exhibition Train at Paddington.—The Atomic Energy Travelling Exhibition, arranged by the Atomic Scientists' Association and the Ministry of Supply, will be at Paddington Station until May 1; times of showing are 10.30 a.m. to 9 p.m., except on Sundays, when private parties are catered for between 2.30 and 5.30. It was stated at an inaugural luncheon, presided over by the Mayor of Paddington, that more than 100,000 people had seen the exhibition during its five months' tour of the provinces. Conducted parties may view the exhibition between 9 a.m. and 10.30 a.m., by arrangement with Dr. F. C. Champion, King's College, Strand, London.

Forthcoming Meetings

April 16 (*Fri.*).—The Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1, at 5.30 p.m. Discussion on "The Mobile Locomotive Testing Plant of the L.M.S.R.," by Dr. H. I. Andrews, Ph.D., A.M.I.Mech.E.

April 16 (*Fri.*).—The Institute of Welding, North London Branch, at the Royal Society of Tropical Medicine & Hygiene, Manson House, 26, Portland Place, W.1, at 7.30 p.m. Annual general meeting and film night.

April 17 (*Sat.*).—The Permanent Way Institution, Manchester & Liverpool Section, at the Temperance Institute, 65, London Street, Southport, at 2.45 p.m. Lantern lecture: "Erection of Girder Bridges," by Mr. H. Wyles, A.M.Inst.C.E., A.M.I.Struct.E.

April 20 (*Tues.*).—The Institute of Transport, Metropolitan Graduate & Student Society, at the Institution of Electrical Engineers, Savoy Place, W.C.2, at 6 p.m. "Recent Developments in Railway Operation," by Mr. H. G. M. Viney (Graduate).

April 20 (*Tues.*).—Royal Society of Arts, Dominions & Colonies Section, John Adam Street, Adelphi, London, W.C.2, at 2.30 p.m. "The New East African Ground Nuts Scheme," by Mr. A. J. Wakefield, C.M.G., B.Sc.

April 21 (*Wed.*).—The Institute of Fuel, London Section, at the Institution of Mechanical Engineers, Storey's Gate, S.W.1, at 2.30 p.m. "Recent Developments in Combustion," by Dr. D. T. A. Townend, D.Sc., Ph.D., D.I.C.

April 21 (*Wed.*).—The Institution of Railway Signal Engineers, at the Institution of Electrical Engineers, Savoy Place, London, W.C.2, at 6 p.m. "Automatic Switching as applied to Teleprinter Working," by Mr. D. Shaw (paper previously read in Manchester).

April 23 (*Fri.*).—The Institute of Transport, Metropolitan Section, Surrey Group, at F. Ayers & Sons, 90, High Street, Guildford, at 7 p.m. Inaugural meeting and short address on "Transport," by Mr. D. R. Lamb, M.Inst.T.

Railway Stock Market

Stock markets have been under the shadow of the persistent fall in British Funds, which have lost in market value fully £75,000,000 since the Budget. Implications of the levy on investment income have affected sentiment. Moreover, it is now apparent that many holders of 3 per cent. Transport and Electricity stocks had hoped for a rally in gilt-edged after the Budget. With the reverse taking place, there has been a rush of small selling of the nationalisation stocks, which have gone to new low levels, 3 per cent. Transport (1978-88) being 94⅜ at the time of writing, with Transport (1967-72) down to 96, and Transport (1968-73) only 96½. Moreover, the recently-issued 3 per cent. Electricity stock was 96¾.

The position is that in the case of these nationalisation stocks, any decline in price brings in further selling on the part of holders who were forced to exchange into them and are perturbed by the fall because of the assumption that in the early stages at any rate there would have been a reasonable prospect of prices keeping close on par. At the time of writing there has been no indication of support of the market, but if the new Stock Exchange account which has now begun does not bring in buyers (yields are beginning to look attractive in some cases) it would seem that official support will be inevitable unless 3 per cent. Transport (1978-88) is to be allowed to drift to the 90 level, which would have big repercussions on gilt-edged.

The behaviour of gilt-edged stocks, coupled with the international news, which kept business at a small level, have reacted unfavourably on other sections of markets, the initial post-Budget gains in leading industrials being mostly lost. Imperial Chemical, for instance, have come back to 49s. at the time of writing, compared with 50s. 3d. towards the end of last week, when the company announced that profits had risen to the new high level of £7,646,933 (an increase of £475,824), representing earnings of over 22 per cent. on the ordinary shares, compared with the unchanged 10 per cent. distribution.

Foreign rails provided some good features. San Paulo was again higher on balance and touched 184 at one time on expectations of an early announcement of when the purchase money could be expected from Brazil. The market is assuming that signing of the Anglo-Brazil trade and financial pact is pending, but it remains to be seen whether this provides for fresh take-over developments in relation to Leopoldina and other railways. Meanwhile, Leopoldina ordinary has been active around 14¼, with the preference stock 44 and the debentures 72. Leopoldina Terminal debentures were 67, but Great Western of Brazil ordinary shares declined sharply to 75s. Uruguay railway stocks were relatively quiet, although Central Uruguay second debentures have strengthened to 83 and North Western Uruguay second preference stock to 31. In other directions, Antofagasta preference improved to 63 and the ordinary was steady at 12. United of Havana 1906 debentures changed hands around 16.

A feature was continued speculative activity in Manila Railway stocks on the assumption that an offer may be made for the company's large holding of Manila Railroad bonds. Manila Railway preference have further improved to 12s. 6d., the "A" debentures were 101, and the "B" debentures 99, while the ordinary 1s. shares were 2s. 3d.

Iron and steel shares have been relatively firm, the good yields still tending to attract buyers. Colvilles, at 31s. 9d., responded to the past year's results; Dorman Long were 31s. 7½d., Guest Keen 50s., and Stewarts and Lloyds 56s. Hadfields have rallied to 27s. 10½d., while Vickers were steady at 29s. 4½d., awaiting the full report.

Traffic Table and Stock Prices of Overseas and Foreign Railways

	Railways	Miles open	Week ended	Traffics for week: Total this year	Traffics for week: Inc. or dec. compared with 1945/46	No. of Week	Aggregate traffics to date: Total 1947/8	Aggregate traffics to date: Increase or decrease
				£	£		£	£
South & Central America	Antofagasta ...	834	4.4.48	52,160	+ 21,110	14	715,940	+ 199,060
	Bolivar ...	174	Mar., 1948	$107,937	— $3,698	13	$294,242	— $46,070
	Brazil ...	—	—	—	—	—	—	—
	Cent. Uruguay ...	970	3.4.48	39,442	+ 11,833	40	1,398,329	— 87,905
	Costa Rica ...	262	Feb., 1948	29,822	— 208	35	266,961	+ 46,589
	Dorada ...	70	Feb., 1948	16,700	— 12,900	9	39,800	— 20,500
	G.W. of Brazil ...	1,030	3.4.48	37,600	+ 7,000	14	531,400	+ 7,100
	Inter. Ctl. Amer. ...	794	Feb., 1948	$1,144,611	— $ 1,242	9	$2,402,164	+ $74,903
	La Guaira	22¾	Mar., 1948	$123,329	— $6,679	14	$291,639	— $63,436
	Leopoldina	1,918	3.4.48	61,811	— 13,648	14	741,989	— 136,358
	Midland Uruguay ...	319	Feb., 1948	16,405	+ 8,378	35	143,912	+ 10,100
	Nitrate	382	31.3.48	15,990	+ 5,202	14	72,991	+ 23,665
	N.W. of Uruguay ...	113	Feb., 1948	5,261	+ 1,916	35	40,635	— 3,127
	Paraguay Cent. ...	274	2.4.48	£ 69,390	+ £ 7,931	40	£ 2,627,812	+ £ 98,098
	Peru Corp.	1,059	Mar., 1948	168,201	+ 13,122	39	1,527,280	+ 170,666
	Salvador	100	Jan., 1948	c350,000	+ c85,000	30	c1,072,600	+ c187,600
	San Paulo	153¼	—	—	—	—	—	—
	Taltal	156	Mar., 1948	11,805	+ 8,880	39	70,410	+ 32,780
	United of Havana ...	1,301	3.4.48	108,537	— 8,364	40	2,852,244	+ 407,727
	Uruguay Northern	73	Feb., 1948	1,261	+ 481	35	9,057	— 965
Canada	Canadian National ...	23,535	Feb., 1948	8,504,250	+ 737,250	9	17,004,750	+ 1,023,250
	Canadian Pacific ...	17,037	Feb., 1948	6,071,500	+ 812,750	9	12,303,000	+ 1,204,500
Various	Barsi Light†	202	Mar., 1948	25,432	— 1,455	52	295,800	+ 23,370
	Beira	204	Jan., 1947	116,310	+ 29,791	18	469,225	+ 113,551
	Egyptian Delta ...	607	29.2.48	18,538	+ 4,573	48	569,862	— 48,579
	Gold Coast	536	Dec., 1947	204,032	— 8,365	39	1,392,691	— 230,301
	Manila	—	—	—	—	—	—	—
	Mid. of W. Australia	277	Feb., 1948	21,855	+ 5,112	35	184,383	+ 48,562
	Nigeria	1,900	Jan., 1948	521,787	+ 59,708	44	3,899,303	— 20,011
	Rhodesia	2,445	Sept., 1947	643,980	+ 102,833	52	6,787,603	+ 612,938
	South African ...	13,323	20.3.48	1,273,200	+ 107,324	51	64,406,722	+ 5,430,550
	Victoria	4,774	Dec., 1947	1,450,410	+ 164,100	26	—	—

† Receipts are calculated @ 1s. 6d. to the rupee